



**Kadir Has University, Istanbul,  
Turkey**



**Dokuz Eylül University, Izmir,  
Turkey**

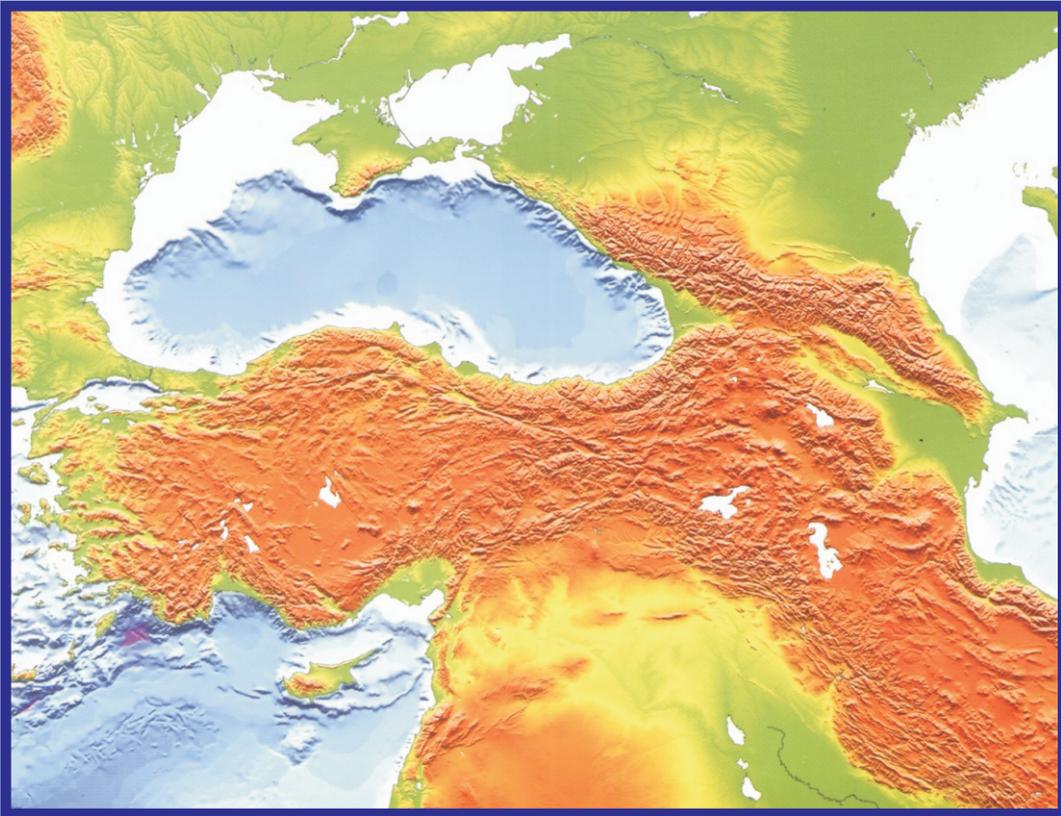


**Çanakkale Onsekiz Mart  
University, Çanakkale, Turkey**



**22-31 August 2009**

## **INTERNATIONAL GEOSCIENCE PROGRAMME**



## **PROGRAMME**

**IGCP 521 - INQUA 0501 Fifth Plenary Meeting and Field Trip**

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

**INQUA 0501 "CASPIAN-BLACK SEA-MEDITERRANEAN CORRIDOR  
DURING LAST 30 KY: SEA LEVEL CHANGE AND HUMAN  
ADAPTIVE STRATEGIES" (2008-2011)**

# IGCP 521-INQUA 0501 Fifth Plenary Meeting and Field Trip, Istanbul-Izmir-Canakkale (Turkey)

## 22-31 August 2009

### ORGANISERS

Kadir Has University, Istanbul,  
Turkey

Dokuz Eylül University, Izmir,  
Turkey

Çanakkale Onsekiz Mart University,  
Çanakkale Turkey

Avalon Institute of Applied Science

### Editors

Allan Gilbert, U.S.A.

Valentina Yanko-Hombach, Canada  
Ukraine

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**Kadir Has University  
Istanbul, Turkey**



**Dokuz Eylül University  
Izmir, Turkey**



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University, Çanakkale Turkey**



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

<http://www.deucbs.com/igcp2009>

**Izmir ◆ 2009**

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## 22, 23 AUGUST 2009

### ARRIVAL AND REGISTRATION

22 August  
14.00-19.00  
23 August  
9.00-18.00

Conference Hall of The Main Library Congress Center, Dokuz Eylül University, Tinaztepe Campus 35160, Buca, Izmir  
Tel: +90 (232) 4128002; Fax: +90 (232) 4128003  
E-mail: kutuphane@deu.edu.tr

### ICE-BREAKING PARTY

19.00-21.00

Social Centre, Second Floor, Dokuz Eylül University, Tinaztepe Campus 35160, Buca, Izmir

## 23-25 AUGUST 2009: TECHNICAL SESSIONS CONFERENCE HALL OF THE MAIN LIBRARY CONGRESS CENTER, DOKUZ EYLÜL UNIVERSITY, TINAZTEPE CAMPUS 35160, BUCA, IZMIR

### 23 AUGUST 2009

Chairpersons: Allan CHIVAS, President of INQUA (Australia)  
Pavel DOLUKHANOV, Co-Leader of IGCP 521 (UK)

### OPENING CEREMONY

10.00-10.30

*Yücel YILMAZ, Rector of Kadir Has University, President of the Conference, and Co-Leader of IGCP 521 (Turkey)*  
*Cahit HELVACI, Vice-President of the Conference (Turkey)*  
*Erdinç YIGITBAŞ, Vice-President of the Conference (Turkey)*  
*Nicolae PANIN (Romania), Co-President of the Fourth IGCP 521-INQUA 0501 Conference and Field Trip (Romania)*

10.30-10.45

IGCP 521-INQUA 0501 fourth year progress report.  
*Yanko-Hombach V., Dolukhanov P., and Yilmaz Y. (Canada, Ukraine, UK, Turkey)*

## **PANEL 1: Palaeogeographic and Palaeoceanographic Reconstructions**

*Moderators: Allan CHIVAS (Australia) and Andrei CHEPALYGA (Russian Federation)*

### **Session 1: Geology, Palaeoceanography and Palaeogeography**

*Moderators: Gilles LERICOLAIS (France) and İlhan KAYAN (Turkey)*

- Chairpersons: Oya ALGAN (Turkey)  
Andrei CHEPALYGA (Russian Federation)
- 10.45-11.15 Active tectonics and the consequent morphology of the Western  
Key-note Anatolian-Aegean region.  
*Yilmaz Y. (Turkey)*
- 11.15-11.30 The extension of the Bosphorus Channel (Istanbul Strait) at the Black  
Sea Shelf  
*Algan O., Lericolais G., Dondurur D., Okay S., Kirci-Elmas E., and  
Çifçi G. (Turkey, France)*
- 11.30-11.45 Relict geomorphological features on the Romanian Black Sea shelf  
*Caraivan G., Teaca A., Begun T., and Mureşan M (Romania)*
- 11.45-12.00 **Coffee Break**
- 12.00-12.15 Modern coastal changes along the Sakarya Delta beaches (SW Black  
Sea) as indicated by field observations and grain size data  
*Ergin M., Karakaş Z., Sözeri K., and Eser Doğdu B. (Turkey)*
- 12.15-12.30 Rapid Holocene sea level and climate change in the Black Sea: A  
comparison of indices (*also poster presentation*)  
*Martin R. (U.S.A.)*
- 12.30-12.45 Postglacial transgressive-regressive cycles of the Black Sea: evidence  
from the northeastern shelf  
*Murdmaa I.O., Ivanova E.V., Levchenko O.V., Platonova E.V.,  
Evsyukov Yu.D., Karpuk M.S., Putans V.A., and Vasileva V.E.  
(Russian Federation)*
- 12.45-13.00 Chronology of an Early Holocene transgressive Black Sea  
*Nicholas W. A., Chivas A. R., Kadurin, S., Murray-Wallace C.V., and  
Fink D. (Australia, Ukraine)*
- 13.00-14.00 **Lunch. Business Meetings of Working and Regional  
Groups.**

## Session 1 (continued): Geology, Palaeoceanography and Palaeogeography

Moderators: Gilles LERICOLAIS (France) and İlhan KAYAN (Turkey)

- Chairpersons: Cahit HELVACI (Turkey)  
Igor BONDAREV (Ukraine)
- 14.00-14.15 Evidence of low sea level at the ancient Theodosius Harbor (Yenikapi-İstanbul) during the Holocene  
*Algan O., Yalçın M.N., Özdoğan M., Yılmaz İ., Sari E., Kirci-Elmas E., Ongan D., Bulkan- Yeşiladali Ö., Yılmaz Y., and Gazioğlu C.*
- 14.15-14.30 OSL dating of the Gelibolu coastal terrace, Çanakkale Strait, Turkey: preliminary results  
*Erginal A.E. and Kiyak N.G. (Turkey)*
- 14.30-14.45 Seasonal fluctuations in Black Sea level and features of palaeo-coast abrasion during the Late Pleistocene–Holocene  
*Esin N.V. and Esin N.I. (Russian Federation)*
- 14.45-15.00 Last Interglacial Kerch Strait: an aminostratigraphic perspective  
*Nicholas W.A., Chivas A.R., Murray-Wallace C.V., Fink D., Yanko-Hombach V., Chepalyga A., and Kadurin S. (Australia, Canada, Russian Federation, Ukraine)*
- 15.00-15.15 The Danube Delta system during the past 12 ka years: new <sup>14</sup>C dating of the deltaic sediments  
*Oaie G., Panin N., Varlam C., Seghedi A., Dului O.G., and Vasilache R. (Romania)*
- 15.15-15.30 Contributions to understanding the sediment sink processes within the Danube-Black Sea system  
*Panin N. (Romania)*
- 15.30-15.45 Arguments in favour of a Holocene rapid transgression in the Black Sea  
*Lericolais G., Loget N., and Soulet G. (France)*
- 15.45-16.00 **Coffee Break**
- 16.00-16.15 The Anti-Noah's Flood: Drowning of the Gemlik "Caspian" Outpost (Marmara Sea)  
*Taviani M., Angeletti L., Çagatay N., Gasperini L., Polonia A., and Wesselingh F. (Italy, Turkey, The Netherlands)*
- 16.15-16.30 Recent environmental changes recorded in sediments from the Western part of the Black Sea  
*Tudryn A., Strehie-Sliwinski C., Tucholka P., Guichard F., Fontugne M., Lericolais G., Panin N., and Colin C. (France, Romania)*

- 16.30-16.45 Absolute ages and depositional characteristics of coastal terraces on the Çanakkale Strait (Dardanelles), Turkey  
*Avcioglu M., Yiğitbaş E., Kiyak N.G., and Erginal A.E. (Turkey)*
- 16.45-17.00 Submarine landscape of the North Black Sea continental shelf- slope transitional zone  
*Bondarev I.P (Ukraine)*
- 17.00-17.15 About environmental changes in the western Black Sea region and their relationship to cycles of solar luminosity  
*Slavova K.R. (Bulgaria)*
- 17.15-18.00 Discussion

## 24 AUGUST 2009

### PANEL II: Archaeology, History, and Ethnology

*Moderators: Pavel DOLUKHANOV (UK), Olena SMYNTYNA (Ukraine), Onur ÖZBEK (Turkey), and Meral AKURGAL (Turkey)*

### Session 2: Archaeology, History, and Ethnology

*Moderators: Pavel DOLUKHANOV (UK) and Olena Smyntyna (Ukraine)*

- Chairpersons: Onur ÖZBEK (Turkey)  
Olena SMYNTYNA (Ukraine)
- 10.00-10.30 Climate, Sea-level dynamics and human colonization of the Caspian and Black Sea coastal areas  
Key-note  
*Dolukhanov P. (UK)*
- 10.30-10.45 The Black Sea continental shelf in the context of offshore European prehistory during the last million years: COST and Project Deukalion  
*Flemming N.C. and Sakellariou D. (UK, Greece)*
- 10.45-11.00 A memory of the late glacial period is preserved by some cosmological myths of European and Asiatic peoples  
*Alekseeva L.M. (Russian Federation)*
- 11.00-11.15 Sedimentological and geoarchaeological evidence for sea-level fluctuations: examples from western Turkey and Greece  
*Brückner H., Vött A., Engel M., and Müllenhoff M. (Germany)*
- 11.15-11.30 Impact of the Dniester hydrological regime on trading relations between ancient populations of the Lower Dniester region and ancient cities of the Black Sea basin  
*Chepalyga A. and Kishliariuk V. (Russian Federation, Moldova)*
- 11.30-11.45 Ancient coastlines of the Black Sea and conditions for human presence

*Dimitrov D., Slavova K., and Dimitrov P. (Bulgaria)*

11.45-12.00

**Coffee Break**

12.00-12.15

Sergei Bibikov and Prehistory of the North Pontic Area

*Dolukhanov P., Matskevych L.G., and Panakhid H. (Ukraine, UK)*

12.15-12.30

New data on the Late Neolithic and Late Bronze Age environments in the southwestern part of the Ukrainian steppe

*Gerasimenko N., Gladyrevska M., Bruyako I., and Gorbenko C. (Ukraine)*

12.30-12.45

Sea-level changes in the Black Sea and their impact on the palaeogeography of the Taman Peninsula (SW Russia) during the Greek colonization of the 1st millennium BC

*Kelterbaum D., Brückner H., Porotov A., Schlotzhauer U., and Zhuravlev D. (Germany, Russian Federation)*

12.45-13.00

Geoarchaeological work in the Lower City of Tanais in 2009

*Kozlovskaya V. and Ilyashenko S. (U.S.A., Ukraine)*

13.00-14.00

**Lunch. Business Meetings of Working and Regional Groups.**

14.00-14.15

Late Mesolithic human adaptations on the Crimean and Azov Steppes

*Smyntyna O.V. (Ukraine)*

14.15-14.30

A peninsula between the Marmara and Aegean Seas: New prehistoric sites and new data on the south of Turkish Thrace

*Özbek O. (Turkey)*

14.30-14.45

Environmental conditions and plant economy in the northern Pontus during the Greek colonization

*Pashkevich G. (Ukraine)*

14.45-15.00

Ancient harbours in the Gulf of Varna

*Peev P. and Pletnyov V. (Bulgaria)*

15.00-15.15

The role of cultural layers from ancient settlements in palaeoecological reconstructions the case of Phanagoria

*Sycheva S.A. and Chepalyga A.L. (Russian Federation)*

15.15-15.30

Connections between vegetation change, human settlements, and changes in the level of the Black Sea during the Holocene

*Sapelko T. (Russian Federation)*

15.30-15.45

**Coffee Break**

15.45-18.00

**Poster Session**

## 25 AUGUST 2009

### PANEL I: Palaeogeographic and Palaeoceanographic Reconstructions

*Moderators: Allan CHIVAS (Australia) and Andrei CHEPALYGA (Russian Federation)*

#### Session 1 (continued): Geology, Palaeoceanography and Palaeogeography

*Moderators: Gilles LERICOLAIS (France) and İlhan KAYAN (Turkey)*

- Chairpersons: Erdinç YIĞITBAŞ (Turkey)  
Antoneta SEGHEDI (Romania)
- 10.00-10.15 Changes in Caspian Sea level associated with historically recorded eruption events in Russia (Caucasia) and Turkey  
*Alekseev V.A., Alekseeva N.G., and Daniyalov M.G. (Russian Federation)*
- 10.15-10.30 Study of sediment transport and erosion along the coastline of Amir Abad Port  
*Azadbakht Z. (Iran)*
- 10.30-10.45 Detailed age control of Khvalynian basin history  
*Chepalyga A., Arslanov Kh., and Yanina T. (Russian Federation)*
- 10.45-11.00 Study of mixing and hydrodynamic parameters in Gorgan Bay (Caspian Sea)  
*Ebrahimi B.G. (Iran)*
- 11.00-11.15 Caspian Sea geotechnical instability hazard assessment using GIS  
*Khoshravan H. and Barimani H. (Iran)*
- 11.15-11.30 Diversity of Quaternary coastal hill and basin topography in the Agh-Ghala plain, Southeastern Caspian  
*Ownegh M. (Iran)*
- 11.30-11.45 Non-traditional resources from the Black Sea bottom and their possible uses as complex raw material  
*Dimitrov D., Shnyukov Y., and Dimitrov P. (Bulgaria)*
- 11.45-12.00 **Coffee Break**

### Session 3: Active Tectonics

*Moderators: Yücel YILMAZ, Hayrettin KORAL, and Erdinç YIĞITBAŞ (Turkey)*

- Chairpersons: Hayrettin KORAL (Turkey)  
Sergei KADURIN (Ukraine)
- 12.00-12.15 Tectonic movements in the Northwestern Black Sea region during last 30 ky  
*Larchenkov E., Kadurin S., Kakaranza S.D., and Eremina L.Yu. (Ukraine)*
- 12.15-12.30 Mode of extension in the Isparta Angle, SW Turkey  
*Koral H. (Turkey)*
- 12.30-12.45 The northwestern Black Sea margin tectonics revealed by potential geophysics and its remote influence on the sedimentary cover structure  
*Dimitriu R.G., Dinu C., and Sava C.S. (Romania)*
- 12.45-13.00 Dardanelles and Bosphorus: a comparative study  
*Yilmaz Y. and Gökaşan E. (Turkey)*
- 13.00-14.00 **Lunch. Business Meetings of Working and Regional Groups.**

### Session 4: PALAEOLOGY AND BIOSTRATYGRAPHY

*Moderators: Andrei CHEPALYGA and Tamara YANINA (Russian Federation)*

- Chairpersons: Maryna GLADYREVSKA (Ukraine)  
Mihaela MELINTE-DOBRINESCU (Romania)
- 14.00-14.15 Calcareous nannoplankton fluctuations in the Holocene deposits of the Northwestern Black Sea  
*Melinte-Dobrinescu M.C. Oaie G., Szobotka S., and Cazacu C (Romania)*
- 14.15-14.30 Holocene palaeobiotic communities in the Northwestern Black Sea  
*Briceag A., Oaie G., and Stoica M. (Romania)*

### Session 5: Palynology

*Moderators: Petra MUDIE (Canada) and Natalia GERASIMENKO (Ukraine)*

- Chairpersons: Hülia CANER (Turkey)  
Tatiana SAPELKO (Russian Federation)

- 14.30-14.45 First centennial-scale pollen stratigraphy from the central Bulgarian Black Sea zone for the last 10,000 years  
*Filipova-Marinova M. (Bulgaria)*
- 14.45-15.00 Environmental and climatic changes in the Ukrainian steppe during the Middle and Late Bronze Ages  
*Gerasimenko N. (Ukraine)*
- 15.00-15.15 Palynological signals of recent anthropogenic impacts on the Black Sea and the implications for early Holocene salinity changes  
*Mudie P.J., Mertens K., Marret F., Verleye T., Aksu A.E., and Hiscott R.N. (Canada, UK)*
- 15.15-15.30 Vegetation change during the Late Quaternary: A pollen record from the Southern Black Sea  
*Caner H. and Leroy S.A.G. (Turkey, UK)*

### PANEL III: Degassing of the Black Sea

*Moderators: Evgeny SHNYUKOV (Ukraine) and Valentina YANKO-HOMBACH (Canada, Ukraine)*

### Session 6: Hot Spot Ecosystems

*Moderators: Valentina YANKO-HOMBACH (Canada, Ukraine) and Bülent CIHANGIR (Turkey)*

- Chairpersons: Mustafa ERGÜN (Turkey)  
Bülent CIHANGIR (Turkey)
- 15.30-15.45 Degassing of the Black Sea: A review  
*Shnyukov E.F. and Yanko-Hombach V. (Ukraine, Canada)*
- 15.45-16.00 **Coffee Break**
- 16.00-16.15 Gas-saturated shallow sediments in the Black Sea and geohazard effects  
*Ergün M., Çifçi G., and Dondurur D. (Turkey)*
- 16.15-16.30 Benthic fauna of the methane seeps in the Dnieper Palaeo-Delta: comparative analysis .  
*Sergeeva N. and Gulin S. (Ukraine)*
- 16.30-16.45 Free-living nematodes in the area of gas seeps in the Black Sea  
*Kulakova I. and Yanko-Hombach V. (Ukraine, Canada)*
- 16.45-17.00 Response of biota to methane emissions in the Black Sea: Preliminary results from complex geological, geochemical, palaeontological, and biological study  
*Yanko-Hombach V., Shnyukov E., Konikov E., Kravchuk A., Kadurin S., Kulakova I., Likhodedova O.G., Larchenkov E., Ponomareva L., Pedan G., Gaponova A., Smyntyna O., Kovalishina S., Pasyнков A.,*

- 17.00-17.15                      *and Bagriy I. (Canada, Ukraine)*  
On the origin of methane in the Black Sea  
*Alekseev V.A., Alekseeva N.G., Daniyalov M.G., and Matvienko G.G.*  
*(Russian Federation)*
- 17.15-18.00                      Discussion and Closing Remarks

### **CONFERENCE DINNER**

- 19.00                              BIRLIK HOTEL Yeni Hall Yani Kaynaklar, Buca, Izmir

### **26 AUGUST 2009**

- 8.00-18.00                      Field Trip around Izmir (Ephesus). Portable lunch.

### **27 AUGUST 2009**

- 8.00-18.00                      Field Trip around Izmir (Miletus). Portable lunch.

### **28 AUGUST 2009**

- 8.00-18.00                      Transfer by conference bus from Izmir to Çanakkale. Field Trip  
around Troy and Alexandria Troas. Portable lunch.

### **29 AUGUST 2009**

- 8.00-18.00                      Field Trip to prehistoric settlements in the Gelibolu peninsula and  
coastal terrace deposits around Çanakkale Strait. Portable lunch.

### **30 AUGUST 2009**

- 8.00-18.00                      Field Trip to Bozcaada eolianite and fossil root casts (rhizolith) and  
beachrocks. Portable lunch.

### **CLOSING CEREMONY**

19.00-21.00 IDA – KALE Resort Hotel, Mola caddesi Güzelyalı – Çanakkale, Turkey

Chairpersons: Ali AKDEMİR – Rector, Çanakkale Onsekiz Mart University, Turkey  
Representative of TECK Madencilik – Türkiye (TECK Mining Company – Turkey)

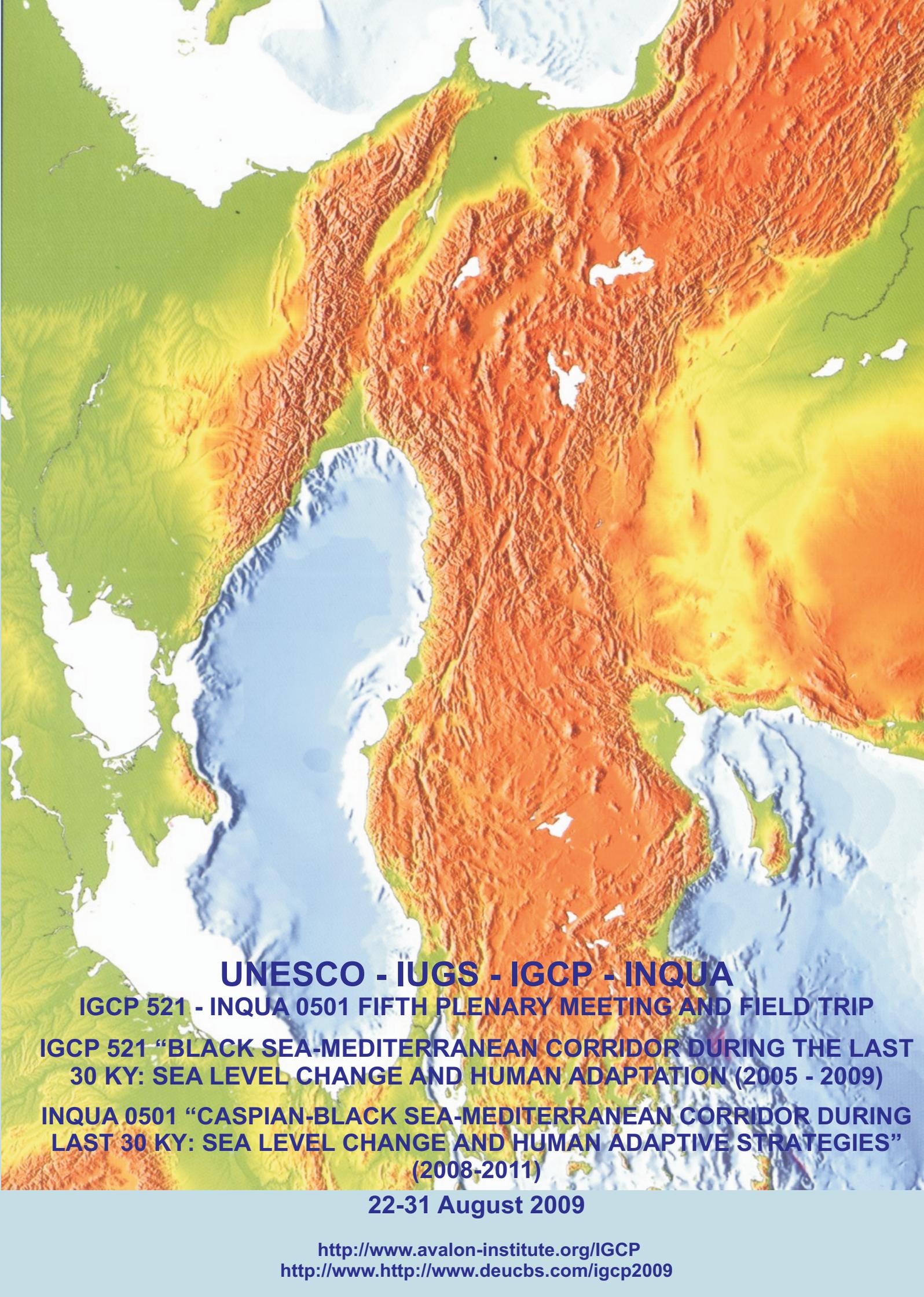
## 31 AUGUST 2009

Departure from Çanakkale to respective destinations. Buses will return to Izmir on the morning of August 31. Those participants who will depart from Izmir will be taken either to their hotels or directly to the airport.

## POSTERS

1. The Eastern Black Sea: Structure, geological history, and hydrocarbon potential  
*Adamia Sh., Chabukiani A., Jaoshvili G., Diasamidze R., Mikadze Kh., Mikashavidze E., Popkhadze L., Sakvarelidze E., and Tumanishvili G. (Georgia)*
2. Holocene history of the coastal evolution of Kalamitskiy Bay (Western coast of Crimea)  
*Agarkova-Lyakh I.V. (Ukraine)*
3. One of the proofs of a Black and Caspian Sea connection in the Holocene  
*Badyukova E.N. (Russian Federation)*
4. The present state of mollusk populations in the Razelm-Sinoe lagoon complex  
*Begun T., Teaca A., Gomoiu M.-T., Opreanu P., and Muresan M. (Romania)*
5. On the problem of technogenic seismicity in Dagestan territory and within the Middle Caspian water area  
*Daniyalov M.G., Ismailov A.Sh., and Levkovich R.A. (Russian Federation)*
6. Formation of large reservoirs and geofield changes  
*Daniyalov M.G., Ismailov A.Sh., Suleymanov A.K., and Saidov O.A. (Russian Federation)*
7. Complex archaeological and geomorphological studies on the northern coast of Kerchenskiy peninsula (Crimea, Ukraine)  
*Danovskiy A., Dikarev V., Kovalchyk A., and Maslennikov A. (Russian Federation)*
8. Mechanism of Black Sea level fluctuations in the Late Pleistocene-Holocene  
*Esin N.V. and Yanko-Hombach V. (Russian Federation, Canada, Ukraine)*
9. Underwater landslides and their distribution on continental slope in northeastern region of the Black Sea  
*Esina L.A. and Khvorosch A.B. (Russian Federation)*
10. Historical reconstruction of destructive earthquakes of the XVII century in South Dagestan and Azerbaijan

- Ismailov A.Sh. (Russian Federation)*
11. A model of water exchange via the Black Sea-Mediterranean Straits as an attempt to reconcile the conflicting theories regarding the histories of these basins 93  
*Izmailov Ya. A. (Russian Federation)*
12. Use of marsh ore from Late Holocene floodplain bogs of the Lower Dniester region in the manufacture of metal by the ancient population  
*Kishliariuk V. and Shuliman A. (Moldova)*
13. Identifying the provenance of south Caspian coastal sediments using mineral distribution patterns  
*Lahijani H. and Tavakoli V. (Iran)*
14. Development of the database of Black Sea benthic diatoms: on-line guide. 1. Genus *Lyrella* Karajeva 1978  
*Lyakh A.M. and Nevrova E.L (Ukraine)*
15. NPP records from the Black and Caspian Seas as indicators of hydrological and environmental changes  
*Marret F., Mudie P., Leroy S.A.G., Aksu A., and Hiscott R. (UK, Canada)*
16. Rapid Holocene sea level and climate change in the Black Sea: A comparison of indices  
*Martin R. (U.S.A.)*
17. Changes in Ostracoda fauna of the Black Sea basin during the Late Quaternary  
*Opreanu P. (Romania)*
18. Transgressive-regressive fluctuations of water level in the Black Sea based on study of the baymouth barrier of Khadzhibeisky liman  
*Ostrovsky A., Konikov E., Arslanov Kh., Balabanov I., Izmailov Ya., Koff G., and Pedan G. (Russian Federation, Ukraine)*
19. Coastal change on the Crimean shore of Kerch Strait since the Bronze Age (Black Sea)  
*Porotov A., Zinko V., and Zinko A. (Russian Federation)*
20. Diversity of modern and ancient microbial communities of the Crimean Peninsula  
*Samylna O.S., Orleansky V.K., and Gerasimenko L.M. (Russian Federation)*
21. Some chemical elements in modern bottom sediments of the Sea of Azov, Kerch Strait, and the northeastern Black Sea  
*Smyrnova L.L., Riabinin A.I., and Saltykova L.V. (Russian Federation)*
22. Black Sea level fluctuations during the Holocene recorded in salt lake sediments of Crimea  
*Subetto D.A., Sapelko T.V., Kuznetsov D.D., Ludikova A.V., Gerasimenko N., Stolba V., and Bakmutov V. (Russian Federation, Ukraine, Denmark)*
23. Ecological aspects of the molluscan fauna from the Northwestern Black Sea Shelf  
*Teaca A., Begun T., Gomoiu M.-T., and Murecan M. (Romania)*
24. New records of the Indo-Pacific symbiont-bearing foraminifer *Amphistegina lobifera* in Greek coastal ecosystems  
*Triantaphyllou M.V., Koukousioura O., and Dimiza M.D. (Greece)*

A topographic map of the Black Sea-Mediterranean region, showing the Black Sea, the Mediterranean Sea, and the surrounding landmasses. The map uses a color gradient to represent elevation, with green and yellow for lower elevations and orange and red for higher elevations. The Black Sea is in the center, and the Mediterranean Sea is to the south. The surrounding landmasses include Europe to the west and Asia to the east.

**UNESCO - IUGS - IGCP - INQUA**

**IGCP 521 - INQUA 0501 FIFTH PLENARY MEETING AND FIELD TRIP**

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

**INQUA 0501 "CASPIAN-BLACK SEA-MEDITERRANEAN CORRIDOR DURING  
LAST 30 KY: SEA LEVEL CHANGE AND HUMAN ADAPTIVE STRATEGIES"  
(2008-2011)**

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