



United Nations
Educational, Scientific and
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International
Hydrological
Programme



Intergovernmental
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Commission



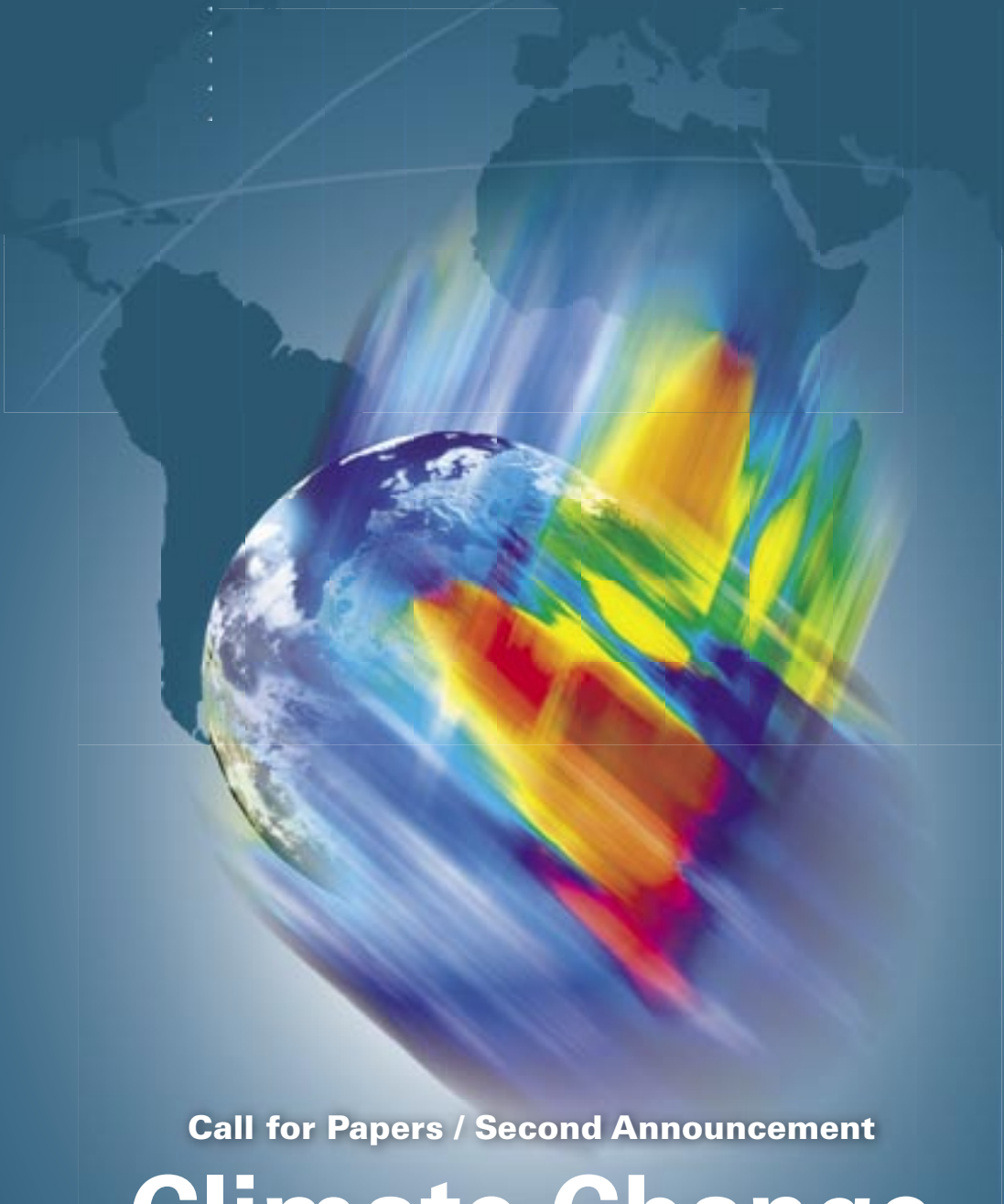
Man and
Biosphere



International Association
of Hydrological Sciences



Global Energy and Water Cycle Experiment
GEWEX
WCRP



Call for Papers / Second Announcement

Climate Change

AT THE EVE OF THE SECOND DECADE OF THE CENTURY

Inferences from Paleoclimate and Regional Aspects

Milutin Milankovitch Anniversary Symposium
Belgrade, 22-25 September 2009

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BACKGROUND

To commemorate 130 years of the birth of **Milutin Milankovitch**, founder of the mathematical approach to the study of climate change, Serbian Academy of Sciences and Arts (SASA) is organizing an international symposium in Belgrade on 22-25 September 2009 entitled "**Climate Change at the Eve of the Second Decade of the Century**". The symposium also honors the 100th anniversary since Milankovitch left his very successful engineering career in Vienna and accepted an appointment at the University of Belgrade, where he launched his scientific study of past climate changes and embarked on his voyage "through distant worlds and times".

TOPICS ADDRESSED

The Serbian Academy of Sciences and Arts along with UNESCO International Hydrological Programme and the Intergovernmental Oceanographic Commission extend a warm invitation to the global scientific and professional community to interact, share, and discuss their findings with in the following topics:

- Recent observational data and research results, including trends in greenhouse gas emissions and key climate indicators such as sea level, underscore longstanding concerns about global warming and its consequences. Earlier climate scenarios and projections, as assessed by IPCC in its 2007 Fourth Assessment Report, have not exaggerated the seriousness of anthropogenic climate change and in some respects now appear to have underestimated the threat. In assessing the climate change impacts, the analysis of paleo-data have recently come to play a major role. Indeed, the IPCC predicts climate changes that have been unprecedented over the last 150 years. Therefore it is important to look for analogues further back in Earth's history. Paleoclimate data have become our most reliable and quantitative measure of climate sensitivity and help us determine the level of human-made climate forcing that are danger-



Serbian Academy of Sciences and Arts (SASA)

ous to humanity and nature. The data have strong implications for global energy policies and fossil fuel use. Paleoclimatology has in this way become a mainstream field in the arena of climate change studies.

- The huge environmental, social, and economic significance of climate change has prompted a large effort in Regional Climate Modeling (RCM) and impact assessment. The vital significance of the issues involved has resulted in many experimental RCM efforts, but this may have been at the expense of those aimed at increased understanding of what the RCM "value added" can be and how it is best achieved.
- Of various societal regional climate change issues, those involving water resources, risks of floods and droughts, watershed management, related biosphere eco-hydrology impacts, and sea level changes are given high priority. UNESCO's mission under IHP VII "Water Dependencies: Systems under Stress and Societal Responses" and under the Intergovernmental Oceanographic Commission, is to strengthen scientific understanding of the impacts of climate change on freshwater systems and oceans, and to communicate scientific findings to policy makers for promoting sustainable management of water resources.

OBJECTIVES

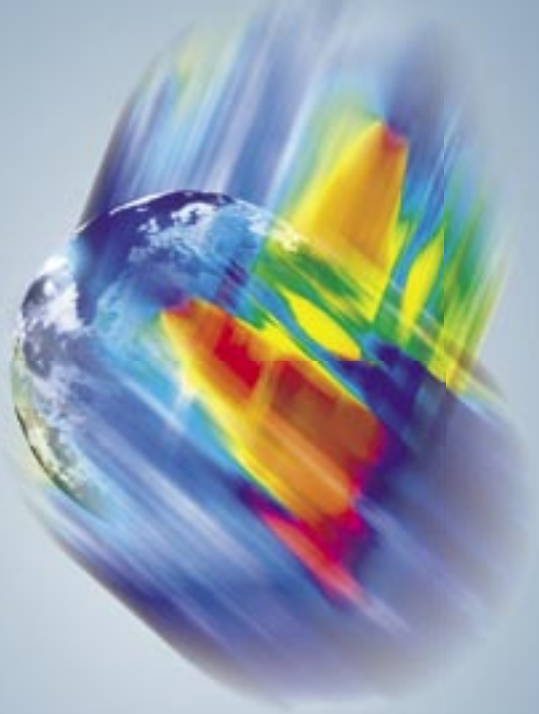
The international symposium aims to bring together scientists from different networks, universities, research institutes and centers, nongovernmental organizations and UN organizations:

- To identify key research topics related to climate change
- To elaborate on the state of the Earth's climate in light of the IPCC's 2007 Assessment Report and evaluate how progress can be achieved on numerous open issues of climate feedbacks
- To identify the new insights into the future of the Earth's climate as acquired from the studies of the Earth's climate as recorded in paleodata, climate sensitivity, equilibrium sensitivity, and "slow" climate feedbacks
- To highlight the Milankovitch legacy and progress in paleo-studies following the Milankovitch 2004 Belgrade symposium
- To evaluate Regional Climate Modeling, the value added, and how it is best achieved. To evaluate the extent to which RCM includes climate change component physics and the future climate in the SEE region
- To assess the climate change impact on hydrological extremes such as floods and droughts; the methods of managing the hydrological risks of floods and droughts; adaptation and mitigation to climate change; and the methods and uncertainties of forecasting hydrological extremes
- To evaluate best practices for managing climate extremes at the river basin level; for linking the science of watershed issues with the societal and economic hazards faced; for transferring knowledge on climate adaptation solutions in integrated watershed management; for validating the effectiveness of the eco-hydrological approach; and for building the capacity of local regions to mitigate and adapt to changes in climate

The symposium will consist of presentations by invited speakers, the contributions from the different networks mentioned above, the poster sessions and an excursion to visit the birth place and the newly restored Milankovitch family home in Dalj, Croatia, on Saturday, September 26th.

The topics of the climate change items above will be scheduled in a plenary session, tentatively the first two days of the symposium. The remaining two days are expected to have parallel sessions addressing the three regional climate and hydrology topics.





THE VENUE

Serbian Academy of Sciences and Arts, Knez Mihailova 35, Belgrade, Serbia

INTERNATIONAL SCIENTIFIC COMMITTEE

Co-chairs

André Berger (CUL, Belgium)
Antonio Navarra (CMCC, Italy)

Members

Ray Bates (UCD, Ireland)
Patricio Bernal (UNESCO IOC)
Milan Dacic (RHMS, Serbia)
Siegfried Demuth (UNESCO)
Marko Ercegovac (SASA, Serbia)
James Hansen (NASA GISS, USA)
Pierre Hubert (IAHS)
Vladimir Jankovic (UM, UK)
Shahbaz Khan (UNESCO)
René Laprise (Canada)
Fedor Mesinger (SASA, Serbia, and Univ. MD, USA)
Carlos Nobre (INPE, Brazil)
Biljana Radojevic (UNESCO)
Bette Otto-Bliesner (CGD/NCAR, USA)
Djordje Šijacki (SASA, Serbia)
Richard Somerville (SIO UCSD, USA)
Peter J. van Oevelen (GEWEX)

LOCAL ORGANIZING COMMITTEE

Co-chairs

Djordje Šijacki (SASA)
Fedor Mesinger (SASA, and Univ. MD, USA)

Members

Milan Dacic (RHMS)
Zoran Knežević (AO)
Caslav Ocic (SASA)
Djordje Zlokovic (SASA)

DELIVERABLES

The development of a symposium statement which will be a contribution for the world wide community in respect to the recent achievements in the key climate change topics. Drafting and acceptance of a symposium statement will be considered at a plenary session. Keynote lectures and abstracts of contributed papers will be published in a proceedings volume which will be promptly published and made available to the climate and environmental communities.

SPONSORSHIPS

The symposium is held under the patronage of UNESCO, International Association of Hydrological Sciences (IAHS) and is sponsored by GEWEX (Global Energy and Water Cycle Experiment) of WCRP. It is co-organized by the National Climate Center Milankovitch of the Republic Hydrometeorological Institute of Serbia (RHMI). Among co-sponsorships expected are those of the Ministry of Environment and Spatial Planning of the Government of Serbia, and of its Agency for the Protection of the Environment.

LANGUAGE

Official language of the Symposium is English.

SCHEDULE AND CONTACTS

Abstracts of contributed papers are due by **June 30, 2009**, sent to the Organizing Committee of the Symposium Milutin Milankovitch, 2009, at (milankovic09@sanu.ac.rs). **Final paper submission deadline is August 15, 2009**. For additional information please contact Djordje Sijacki (sijacki@phy.bg.ac.yu) or Fedor Mesinger (fedor.m@comcast.net).

Further details, including hotel information, can be found online at:

www.sanu.ac.rs/English/Milankovic2009/Milankovic.aspx