

NEWSLETTER

Commission on Climatology

Nº 17

December 2017

Dear Friends and Colleagues,

The year 2017 is coming to a close. Firstly, I personally apologize for the delay of the issue of our newsletter. I took over former Chair of the Commission on Climatology, Prof. Zbigniew Ustrnul in September 2016, but did not inform it to you until now. Anyway, it is a big job for me to not only maintain but also expand our activities, and I will try my best to fulfil these important duties. In addition to Prof. Zbigniew Ustrnul, Prof. Latifa Henia, Prof. Nigel Tapper and Dr. Elena Voskresenskaya have stepped down due to the end of their terms. Also Prof. Barbaros Gönençgil has promoted to the Vice President of IGU and left our commission member. We appreciate very much their great contribution to our past activities and would like to expect their continuous future contribution. In place of them we have added one new secretary and five new steering committee full members as introduced later. As such, our Commission on Climatology has changed a lot, but we will continue our mission to promote research in the areas of meteorology, climatology and related disciplines. In order to do this, the Commission will hold at least five climatology sessions during the coming IGU Regional Conference held on August 18-22, 2018 in Quebec, Canada as introduced in this newsletter. The deadline for registering research papers and posters has been fixed on March 15, 2018. I cordially encourage all of you to register for the Conference and be active during our sessions. I would like to take this opportunity to wish all climatologists all the best for the New Year and that all of your research efforts will be productive. Hope to see you at the Commission on Climatology sessions at the Regional Conference in Quebec!

Best Regards,

Jun Matsumoto (Chair of the Commission on Climatology)

Contents:

- 1. Membership of the COC steering committee
- 2. Introduction to the CoC steering committee members
- 3. Memorial for Prof. Masatoshi, Yoshino
- 4. A report on Brazilian Symposium on Geographical Climatology (The XII SBGC)
- 5. The CoC organized Session Proposals for 2018 IGU, Quebec, Canada
- 6. Others

IGU UGI

1. Membership of the CoC steering committee

Full Members

Chair: Jun Matsumoto Department of Geography, Tokyo Metropolitan University, 1-1 Minamiosawa, Hachioji, Tokyo 192-0397 Japan ph: +81 42 677 2596, Fax: +81 42 677 2589 e-mail: jun@center.tmu.ac.jp

Francisco Mendonça

Federal University of Paraná Dep Geografia Centro Politecnico Jd. Américas 81531-970 Curitiba Brasil ph : +55 41 3361 3458 e-mail: <u>chico@ufpr.br</u>

Roger S. Pulwarty

National Oceanic and Atmospheric Administration and University of Colorado, Climate Diagnostics Center, 325 Broadway, R/CDC1, Boulder Colorado 80305, USA ph: +1 303 497 4425 e-mail: <u>roger.pulwarty@noaa.gov</u>

Babatunde Joseph Abiodun

Department of Environmental and Geographical Science, University of Cape Town Rondebosch, South Africa ph: +27 0 216505737 e-mail: <u>babiodun@csag.uct.ac.za</u>

Hadas Saaroni

Department of Geography , Tel Aviv University P.O.B 39040, Ramat Aviv, 69978 Tel Aviv, Israel ph : +972 36406470 e-mail: <u>Saaroni@post.tau.ac.il</u>

Secretary:

Japan

Yoshihiro Iijima

Mie University,

Graduate School of Bioresources,

e-mail: yiijima@bio.mie-u.ac.jp

1577 Kurima-machiya-cho, Tsu, Mie 514-8507

ph: +81 59 231 9354 Fax: +81 59 231 9634

Zahide Acar Deniz

Department of Geography, Faculty of Arts and Sciences, Çanakkale Onsekiz Mart University, P.O. Box 17100, Canakkale, Turkey ph : -90 286 2180018 e-mail: <u>zdeniz@comu.edu.tr</u>

Jennifer Salmond

School of Environment University of Auckland Private Bag 92019 Auckland 1142 New Zealand ph: +64 9 923 8650 e-mail: <u>j.salmond@auckland.ac.nz</u>

Ana Monteiro

Department of Geography, Porto Universty Via Panorâmica s/nº, 4150 Porto, Portugal ph: +351 919698402 e-mail: <u>anamt@letras.up.pt</u>

Agnieszka Wypych

Department of Climatology, Jagiellonian University, Gronostajowa 7, 30-387 Krakow, Poland ph: +48 12 6645325 e-mail: agnieszka.wypych@uj.edu.pl

Guillaume Fortin

Département d'histoire et de géographie Faculté des arts et des sciences sociales Université de Moncton, Canada ph: +1 506 858 4364, e-mail: guillaume.fortin@umoncton.ca

Honorary & Senior Members

IGU UGI S. Gregory (U. K.), M. Domroes (Germany), L. Nkendirim (Canada), Z. Ustrnul (Poland) A. Douguédroit (France), R. Brazdil (Czech Republic), T. Mikami (Japan), A. Bitan (Isdrael)

2. Introduction of new CoC steering committee members

Dr. Yoshihiro lijima



Dr. Yoshihiro lijima is an Associate Professor at Graduate School of Bioresources, Mie University, Japan. His study field is the interaction between land surface processes and atmospheric climate system in the cold continental region with underlying permafrost mainly using field observations of meteorological, ecological and hydrological components. Satellite data analysis and land surface process model in a multi-scale are another proficient skills in cooperated with climate data analysis. His collaborative studies are

extending to assess hazards and their impacts along with climate change on indigenous people in Siberia in Russia and Mongolia in cooperate with international collaboration with researchers of natural and social sciences. His study area extends northern part of Eurasia, such as Siberia, Mongolia, and Kazakhstan, and Arctic. Currently, the major participating researches are the Arctic Challenge for Sustainability (ArCS) project promoted by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) in Japan, Integrating Dryland Disaster Science promoted by the Japan Society for the Promotion of Science (JSPS), North-eastern Eurasian PMM united validation experiment (NEPTUNE) promoted by Japan Aerospace Exploration Agency (JAXA) and Action Group (Permafrost and Culture) in International Permafrost Association (IPA).

Dr. Zahide Acar Deniz



Dr. Zahide Acar Deniz, was born in Izmir, Turkey. In 2005, she graduated from Canakkale Onsekiz Mart University, Department of Geography. She received her master's degree and doctorate on Climatology. In 2008, she started working as an assistant at Canakkale Onsekiz Mart University, Geography Department. She is currently an Assistant Professor of Geography at the same university. Her study areas concentrate on climatology, extreme weather evets, climatological hazards and synoptic climatology. The courses her teaches are also applied

climatology and synoptic climatology. She has published 5 articles, papers and book chapter and has more than 10 conference, symposium and panel presentations. In addition, she has conduct a project the Scientific and Technological Research Council of Turkey.

Dr. Babatunde Joseph Abiodun



IGU UGI Dr. Babatunde J. Abiodun is an Associate Professor at University of Cape Town (UCT), where he lectures and coordinates Atmospheric Science Programme for the Department of Environmental and Geographical Science. He is also an Adjunct Professor at the University Missouri Kansas City. Prior to joining UCT, he was a Postdoctoral Research Associate at Iowa State University (2005-2008 and a Lecturer at Federal University of Technology Akure (2000 – 2008). His research interest is in development and application of atmospheric modelling. At ISU, he

led the development of a global atmospheric model with grid adaptation. Dr. Abiodun is an international scholar who has co-authored 3 book chapters and published more than 50 peer-reviewed papers in high-profile international journals, including Theoretical and Applied Climatology, International Journal of Climatology, Climate Dynamics, Atmospheric Chemistry and Physics, Atmospheric Environment, Meteorological Applications, Meteorology and Atmospheric Physics, and Regional Environmental Change. He served as a Lead Author in the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report on Climate Change (AR5) 2013: The Physical Science Basis (2010 – 2013). He is an award winning climate scientist whose research has been funded by agencies like the global change SysTem for Analysis Research and Training (START), the South African National Research Foundation (NRF) and the Southern Africa Water Research Commission (WRC) to focus on development and application of climate models in improving

knowledge on regionally-extensive drought over Africa, extreme weather and climate events, and impacts of reforestation activities on regional climates. He received the Innovative Research Award at FUTA in 2007, the Best Research Presentation Award at World Climate Research Programme (WRCP) at Open Science Conference in Denver in 2011, and the Prestigious Stanley Jackson Award at the South African Society for Atmospheric Sciences (SASA) conference in 2013. He is a member of Council of the Society of South African Geographers (SSAG) (2012 - present), and an Associated Editor of the interdisciplinary journal of Advances in Statistical Climatology, Meteorology and Oceanography (2014 – present).

Dr. Jennifer Salmond



IGU UGI A geographer by training, Jennifer has an MA in Geography from Oxford University, MSc. in Applied Meteorology and Climatology from the University of Birmingham (UK) and PhD from the University of British Columbia, Canada in 2001. She is currently an Associate Professor in the School of Environment, University of Auckland. As an urban meteorologist, her research focus extends from studying the meteorological controls on urban air pollution to quantifying human exposure and the uptake of air pollutants. She collaborates with experts

from a range of disciplinary backgrounds and her work encompasses the development of novel instrumentation, field measurement and modelling approaches. Jennifer also has research interests in the field of urban climate risk. Jennifer has an active interest in understanding more about the ways in which her research is affected by wider social, economic, institutional and political agendas. Favoring a critical physical geography perspective, Jennifer encourages a reflective approach to research, with an emphasis on identifying and acknowledging the implicit and explicit assumptions which underpin theoretical frameworks, methodological approaches and the actualization of knowledge.

Jennifer has published more than 50 papers in international journals and has numerous other publications and presentations linked to high profile conferences in the field of air pollution. She has over 1000 career citations. In both her capacity as principal and co-investigator she has been awarded over \$8 million in external research funding to study air pollution from diverse sources such as the Ministry of Business, Innovation and Employment, the Health Research Council, and the National Environmental Research Council (UK). Her expertise has been recognized by invitations to serve on, or act as an advisor to, local, national and international committees which seek to research and manage air quality issues both within New Zealand and abroad. Her research eminence is further evidenced by her peer esteem as an invited member of the steering groups which designed and gained funding for international field campaigns to study air quality in urban areas in Auckland, Toulouse, London and California. She has served as an elected member, secretary and an advisor to the Board of the International Association for Urban Climate and Vice President (Auckland) for the New Zealand Meteorological Society. She is Co-Chair of Healthy-Polis, an international consortium on urban environmental health and sustainability. She was a member of the Editorial Board of the Transactions of the Institute of British Geographers and co-editor of the Journal Weather and Climate.

Dr. Guillaume Fortin



Guillaume Fortin is an Associate Professor in Geography and Director of the Environmental Studies Master Program at the Université de Moncton in New Brunswick, Canada. He teaches courses to students, supervises graduate students, and does research in the areas of Applied Climatology, Environmental Geography, and Environmental Change.

Guillaume is currently working on the climate variability of Eastern Canada and Northeastern US. His research was first focused on the snow cover, avalanches

and climate connections but most recently he's also been interested on better understanding how the recent climate change has impacted the local and regional vegetation patterns and processes. He's also worked on Microclimatology, Hydrology Dynamic and Natural Hazards related to weather and climate.

Dr. Agnieszka Wypych



IGU UGI Agnieszka Wypych is an Associate Professor in in Jagiellonian University, Institute of Geography and Spatial Management, Department of Climatology. She has been working as a researcher and academic teacher. Since 2011 has also been employed as a part-time researcher by Institute of Meteorology and Water Management – National Research Institute. She received the MSc diploma (physical geography) from Jagiellonian University, Institute of Geography and Spatial Management and a PhD from Jagiellonian University, Faculty of Biology and Earth Sciences. She received also

a Master of Science degree in Geographical Information Science and Systems from University of Salzburg. The main research fields cover climatology, hydroclimatology and GIS in environmental sciences while the current research interests are mostly weather extremes, climate change and variability and atmospheric circulation with a special focus on its impact on atmospheric water vapor.

She has been involved in many national projects mostly devoted to climate variability and extremes, and also in a few international research projects focused on climate change impact on the environment (multidisciplinary).

In the period 2008-2016 Agnieszka was an administrative member of the Commission on Climatology responsible for the CoC secretariat.

3. In memory of Masatoshi Yoshino (1928-2017) Takehiko Mikami (Professor Emeritus at Tokyo Metropolitan University, Japan)

Masatoshi Yoshino, 89, passed away on July 4, 2017 in Morioka-city. His professional career began in 1953 as a research assistant at Tokyo University of Education. Since then, he worked in extensive educational activities and gave academic lectures at Hosei University (1969-1974), University of Tsukuba (1974-1991) and Aichi University (1991-1998) as a full professor. He was a senior adviser to the United Nations University (2001-2010).

Professor Yoshino served the IGU as the founder and the Chair of the Commission on Climatology (1988-1992) and as a Vice President (1992-1996). The Commission on Climatology has been one of the most active commissions in the IGU, having several independent regional workshops and symposia in many countries including Tokyo, Japan in 1999.

Professor Yoshino had been writing a great number of articles and books on climatology, among which "Climate in a Small Area – an Introduction to Local Meteorology" (University of Tokyo Press, 1975) was highly evaluated. He published more than 40 books including co-authored ones in English and Japanese.

In addition to his research and educational work, Professor Yoshino had been a foreign honorary member of the Romanian Academy since 1992, and a recipient of the IGU's Laureat d'Honneur award in 2000. He was awarded "2007 Luke Howard Award" from the IAUC (International Association for Urban Climate).

Although it would be difficult to introduce all his diverse achievements here, Professor Yoshino might be remembered by many people as a rare climatologist and an able leader or organizer in the world of geography and climatology.

4. A report on Brazilian Symposium on Geographical Climatology (The XII SBGC) Francisco Mendonça

The XII - SBGC (Brazilian Symposium on Geographical Climatology) was held in the city of Goiânia, central region of Brazil from October 25 to 29, 2016. The biennial event was organized by CLIMAGEO - Climatology Laboratory of the UFG (Federal University of Goiás), with the support of ABClima -Brazilian Climatology Association (founded in December 2000 - www.abclima.ggf.br/). The event counted on about 350 participants, and 250 scientific contributions were presented in oral and poster form (the annals of the Brazilian events of Geographical Climatology Symposium can be consulted at http://www.abclima.ggf.br/publicacoes.php). In addition to Brazilians, colleagues from Italy, France, Canada and the United States also participated. The main theme of the event was "Climate variability and susceptibility: ecosystem and social implications", which was subdivided into the following 6 thematic axes: 1. Teory and method in climatology; 2. Climate risks, vulnerability and susceptibilities; 3. Urban climatology: studies and management of cities; 4. Regional climatology and agroclimatology; 5. climates of the brazilian savana; 6. Emerging themes and approaches in climatology. These themes were dealt with in the two magisterial conferences and in the three round tables, in addition to being the agglutinative themes of the more than 200 scientiphic contributions presented at the event. A section of homage and a field trip also made up the activities of the event. A new direction of ABClima was elected at the end of the event, and Prof Fabio Sanches (UFU - Federal University of Uberlândia) assumed the presidency of the association for the 2016-2018 biennium. Prof Jun Matsumoto (CoC-UGI President) sent a greeting message to the event, which was greatly appreciated by the Brazilian climatologists community.



Goiania/GO (Brasil)

5. Session Proposals for 2018 IGU, Quebec, Canada

IGU UGI The CoC proposes at least the following four sessions as our organized session in the 2018 IGU Regional Conference and Annual Meeting of the Canadian Association of Geographers, Quebec, Canada, August 6th-10th 2018 (http://igu2018.ulaval.ca/). The organized session(s) may increase in accordance with the additional proposal(s). In addition, open session C3-SP100 will also be organized, and any other topics related with climatology will be welcome. We are looking forward to submitting your abstract to and participation in our sessions!

[C3-SP1]

Title: Climate Change: Recent Trends in the Americas

Conveners: Guillaume Fortin, Francisco Mendonça, Roger S. Pulwarty

Abstract: Special session organized by the UGI Climate section

This session focuses mainly on the recent changes of the climate observed in the Americas. Different views can be addressed to illustrate and appreciate the difference observed in the past, actual and future climates in the Americas. The local and regional scales of climate can be addressed through recent studies to improve our knowledge of the climate of the Americas. The impacts of climate changes in urban environments of the Americas as well as other environment could be presented.

[C3-SP2]

Title: Natural Hazards, Extreme Weather and their Impacts: Memorial Session I of Late Prof. Masatoshi Yoshino

Conveners: Hadas Saaroni, Agnieszka Wypych, Zahide Acar Deniz, Yoshihiro Iljima

Abstract: Natural hazards of meteorological/climatic origin are frequent and recurrent in our geosystems. Their impacts on ecosystems and societies are important in terms of financial costs and human lives. Various aspects such as the identification of certain causes of natural hazards can be addressed through different methods of detecting past risks using multiple types of data (instrumental, indirect, etc.). Understanding the processes and mechanisms underlying natural hazards of meteorological and/or climatic origin can be addressed through case studies. Finally, the consequences of these risks in terms of ecological, geomorphological or societal impacts and the means developed for monitoring, forecasting and adaptation can be addressed. This session is organized as one of the memorial sessions of Late Professor Masatoshi Yoshino, who contributed greatly to the development of climate impact studies, founded the Commission of Climatology, served as a former Vice-President of IGU, and regrettably passed away on July 4, 2017.

[C3-SP3]

Title: Urban Climate: Memorial Session II of Late Prof. Masatoshi Yoshino Conveners: Jun Matsumoto, Jennifer Salmond

Abstract: The session will focus mainly on the recent urban climate studies in any part of the world. Studies on the difference among different regions and/or different urban characteristics are welcome. Both observation and model studies can be presented. The impacts of urban climate on increase of hazard risk, human health, ecosystem and other phenomena could also be presented. This session is organized as one of the memorial sessions of Late Professor Masatoshi Yoshino, who contributed greatly to the development of small-scale climate, including urban climate, founded the Commission of Climatology, served as a former Vice-President of IGU, and regrettably passed away on July 4, 2017.

[C3-SP4]

IGU UGI

Title: Current and Future Tasks of Urban Planning Due to Urban Climate Convener: Sascha Henninger

Abstract: Knowledge of local climate, the resulting air quality situation and their functional relationships are important aspects of environmental precaution in urban planning. The applied, planning oriented urban climatology in this case represents the link between climatology and urban planning. Urban climatology can offer an extensive range of solutions that both appear in areas with microclimatic and air quality issues. Urban climate analysis, climatological function maps and planning recommendation maps allow urban planning to address major climatic aspects within the municipal operational framework. Especially for the responsible for urban and environmental planning it is now – more than ever – important to receive subject-specific responses to climatic

and air quality problems in urban areas. For urban planning, this means that environmental and urban climate issues need to be involved in the planning in more detail than before. This includes different levels. Exemplarily, at the level of area-based planning, for instance the importance of small inner-city green spaces for the local climate of urban redevelopment especially in climatically strongly biased, neighborhoods has to be considered specifically.

6. Others

Corresponding Members

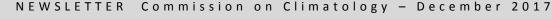
We kindly remind and ask every Commission on Climatology Full Member to prepare the potential list of Corresponding Members: people who are interested in cooperating in the frame of CoC, who find the CoC activities important and have the possibility and – what's more important – desire to sustain the international research cooperation and studies on the field of climatology, encourage the exchange of relevant documents and information and organize conferences or meetings. We would try to involve all the people to meet together in Quebec to discuss further perspectives and plans for CoC activities.

CoC website

http://www.klimat.geo.uj.edu.pl/CoC.htm

Edited by: Jun Matsumoto – Department of Geography, Tokyo Metropolitan University, 1-1 Minamiosawa, Hachioji, Tokyo 192-0397, Japan, e-mail: jun@center.tmu.ac.jp

Yoshihiro lijima – Graduate School of Bioresources, Mie University, 1577 Kurima-machiya-cho, Tsu, Mie 514-8507 Japan, e-mail: yiijima@bio.mie-u.ac.jp



IGU UGI