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Compiled by Elena Grigorieva and Scott Sheridan

Also check out:

The ISB site

<http://www.biometeorology.org>

The Student and New Professionals' website

<http://biomet-education.net>

The Student and New Professionals' newsletter

<https://mailchi.mp/34f5554a0f76/august-late-i-know-2019-snp-newsletter?e=505996b6bb>

 @biometeorology

ICB-2020 and COVID-19

Pablo Fernandez de Arroyabe,
President of the International Society of Biometeorology

Dear ISB members and colleagues

We are very concerned with the impact of the COVID spreading and potential outbreaks in relation to the celebration of the International 22nd Congress of Biometeorology in Jaboticabal, Brazil in 19-22 July, 2020. The Local Organizing Committee and the Executive Board of the ISB are working on the idea of having the meeting as it is planned but we are also aware that circumstances could change very rapidly given that the World Health Organization (WHO) have declared a pandemic. In this sense, we are also considering different emergency plans to enact if the situation gets worse.

We are following the news from the WHO and other trustworthy scientific institutions in relation to the spreading of the virus and the existing limitations for travelling that are taking places among different countries. Political decisions about this issue vary a lot depending on each country. Some universities and research centers do not allow to their members to travel to specific countries for attendance at conferences, and social events where many people get together are being temporally cancelled in some countries.

It is still more than four months from the celebration of the Congress and we all hope the situation will be solved before the Congress. That is why local organizers are working on the idea of celebrating the Conference as it is planned, but we would like to offer you some Guidelines and Recommendations. We need to consider these possibilities in advance. Some of them have also been given by other organizers of big scientific events:

Pause registration to allow time to become clearer as other Conferences have done e.g. <https://www.egu2020.eu/> (The deadline registration has been delayed without an increase on the price of registration)

You can also pause your bookings of transport and accommodation until we have more information about the evolution of the COVID virus. If you decided to book it in advance, please include an insurance that will cover possible cancellation. ISB will not be responsible for reimbursement of expenses if the Conference is cancelled or postponed.

It is too soon to say anything else but we are keeping an eye on the daily evolution of the virus. We have to be patient to know exactly how transmissions rates evolve, where new cases emerge and what limitations these considerations imply in terms of public health.

I am looking forward to hopefully meeting you in Jaboticabal

China Phenological Observation Network (CPON) Arranged Pheno-Cam Observations at Beijing Forest Ecosystem Research Station, Chinese Academy of Sciences in last Summer

Junhu Dai

From July 14 to 16, 2019, under auspices of National Key R & D Program of China, "The mechanism and future trend for responses of vegetation phenology to global change in China" and projects of National Natural Science Foundation (NSFC) of China, Prof. Junhu Dai's Phenological Research Group at the Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, visited Beijing Forest Ecosystem Research Station, which is located in Lingshan Mountain in the South of

Beijing City, and arranged their spectrometric monitoring of forest phenology inside the station on the mountain. They were accompanied by their optical science partners from Xi'an.



Fig. 1 The location of Beijing Forest Ecosystem Research Station (the position under the magnifying glass)

The visiting research team conducted field investigations for plant communities, installation of the spectrometric monitoring systems and collection of rock samples for future application in radiometric calibration in temperate forests. The main tasks of this trip were: (1) to formally arrange the automatic instrument observations of forest phenology for deciduous broad-leaved forest in warm temperate zone; (2) to arrange and test the spectral monitoring management system. And finally, (3) to construct an instrumental platform to observe vegetation phenology besides their ground artificial plant phenology observations. The core parts of the monitoring system include 8 spectrum cameras and corresponding spectrometers. The results of three days field tests were very satisfactory.



Fig. 2 The vegetation view of the observation field

In last year, they installed similar systems in almost 10 different places in China, and started the construction of the Pheno-cam Web for the CPON. And this signals that after more than 50 years' ground observations, the network has already had both ground artificial and instrumental spectrum observations for plant and vegetation phenology. They hope based on the updated phenological observation platform, they will expand their cooperation both at home and in abroad with other colleagues in the field of phenological observations and studies.



Fig. 3 On-the-spot installation of the Phenology camera

First human thermal stress and discomfort reanalysis dataset released

Claudia Di Napoli

On 15 January 2020 Claudia Di Napoli and colleagues from the European Centre for Medium-Range Weather Forecasts (ECMWF) released a historical gridded dataset for two biometeorology indices - the universal thermal climate index (UTCI) and the mean radiant temperature (MRT).

The dataset is called ERA5-HEAT (Human thErmAl comfort) and is based on ERA5, the latest ECMWF climate reanalysis describing the observed climate as it has evolved during recent decades.

ERA5-HEAT can be download via a user-friendly interface from the Copernicus Climate Data Store (<https://doi.org/10.24381/cds.553b7518>). Freely available to all, it provides the first reanalyses of UTCI and MRT ever produced from a climate reanalysis at a global scale.

The dataset currently spans back to 1979 and is updated daily within five days of real time.

Announcement of the preparation of the book “Applications of the UTCI in Biometeorology” for the Biometeorology Series from Springer

Eduardo Kruger

We would like to announce a book, which is being prepared in international collaboration and edited by Eduardo Krüger, from the Federal University of Technology, based in Curitiba, Brazil. The book will appear next year by Springer and addresses the thermal index UTCI, reporting updates and case studies.

Description and purpose of the book

Thermal comfort indices for applications in outdoor spaces such as pedestrian streets, urban squares and parks, provide relevant information to planners who seek more adequate conditions for urbanites as well as an integrated assessment of perceived thermal comfort/thermal stress for several issues related to health & safety and biometeorology (as in heatwaves or future climate projections, for example). Advanced applications include urban climatology, where index results can be used as important indicators of benefits or hazards from changes in urban morphology or parameters such as vegetation and water bodies. Such indices combine relevant meteorological data as air temperature and humidity, wind velocity and solar radiation in a single value, which can be then translated to

categorical scales expressing the predicted degree of human thermal stress or comfort. The proposed book intends to describe applications of the outdoor thermal comfort index UTCI in the areas of Human Biometeorology and Urban Planning. The Universal Thermal Climate Index 'UTCI' (<http://www.utci.org/>) was developed within the framework of the International Society of Biometeorology (www.biometeorology.org), who in 2000 established the UTCI ISB Commission 6. Recognizing the importance of having reliable indices for climate-responsive urban planning, the book will summarize the fundamentals behind UTCI and show case studies by the author and colleagues using UTCI as well as an up-to-date literature review of applications of the index.

The topic of the book is timely relevant as heatwave frequency is in a rising trend in many parts of the world. There will be a great need for humans to adapt to heatwave conditions, which will likely increase in frequency due to global climate change. Another important issue is the urbanization trend worldwide. Along with this trend, megacities or large urban agglomerations are expected to boom around the globe, and not only restricted to developed countries. Both global climate change and urbanization trends will demand adaptation measures in cities. Large agglomerations and impacts on landscape and natural environments due to city growth will require guided planning schemes in urban areas. Understanding the human-biometeorological implications in city or district planning with an overlay of basic climatic information with human-biometeorological information is very useful for planners.

The subject matter is also relevant to human health research. As relevant support to studies involving different adaptive opportunities (physiological, psychological, social and behavioral) of humans in outdoor spaces, comfort/stress indices can also gauge the extent of such adaptations, such as assessing the impact of a continuous usage of air-conditioned indoor spaces on tolerance of pedestrians to heat or cold stress. Another important application is the possibility of better assessing comfort/stress levels in

particular locations accounting for target age and gender groups, metabolic rate and clothing insulation levels.

From such perspectives, the book will explore the basics of the UTCI index, showing examples of its application in various climates and proposing possible ways to use it in urban planning.

Brief synopsis

The outdoor thermal comfort index UTCI (Universal Thermal Climate Index) was developed within the scope of the European COST Action Program and delivered to the scientific community firstly in 2009. After completion, due to time constraints, developers of the index pointed to the need for evaluation and validation of the UTCI index. Recognizing the importance of having reliable indices for climate-responsive urban planning, the book will summarize the fundamentals behind UTCI and show case studies by the author and colleagues using UTCI as well as an up-to-date literature review of applications of the index.

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Upcoming Conferences

22nd International Congress on Biometeorology
Jaboticabal, Brazil, 19 to 22 July 2019

<https://inobio-manera.fcav.unesp.br/index.php/events/22-icb/>

The INOBIO-MANERA (Innovation in Biometeorology and Animal Welfare Group), together with the International Society of Biometeorology and the

Brazilian Society of Biometeorology, Ambience and Animal Welfare (SBBiomet), invites all professionals, researchers, and students to the 22nd International Congress of Biometeorology and the VIII Brazilian Congress of Biometeorology, Ambience and Welfare. The event will feature nationally and internationally renowned participants in the areas of human, plant and animal biometeorology, with the theme “One Earth One Life”.

The Venue

ICB2020 will be held at São Paulo State University, located in the City of Jaboticabal in São Paulo State – Brazil. Jaboticabal is a country city, the name of which came from a native tree, called Jaboticabeiras. It is 370 km from São Paulo and 53 km from Ribeirão Preto. It has an area of 707 km² and population of 73,084. During July Jaboticabal has a temperature range of approximately 10 to 20°C. The economy of the area is based on agriculture, and has an influence of Portuguese, Spanish, Japanese and Arab culture.

The following links will take you to information about Jaboticabal city and São Paulo State University – Jaboticabal Campus:

<http://www.jaboticabal.sp.gov.br/2010/index.php/conteudo/listar/22/historia>

<https://www.fcav.unesp.br>

Congress Programme

The Congress will run between July 19th and July 22nd, 2020.

July 19th: Registration will be from 17:00 hour, and a Welcome Reception with Hors d'oeuvre (coffee break) will take place at the Central Building Hall 19:00 – 22:00 hour.

July 20th – 22nd: The complete Congress programme is available at: <https://inobio-manera.fcav.unesp.br/index.php/events/22-icb/>

July 22nd (evening): Closing Ceremony – Cultural presentations, awards, show and icebreaker.

Call for papers

Instructions for papers and General Guidelines for oral and poster presentations at 22nd International Congress of Biometeorology and VIII Brazilian Congress of Biometeorology, Ambience and Welfare are available

at: <https://inobio-manera.fcav.unesp.br/index.php/events/22-icb/22-icb-call-for-papers/>

Important Dates

October 1st to December 15th 2019: Abstract submission.

February 15th 2020: Notification of acceptance or non-acceptance of papers and posters.

Registration

October 1st 2019 – April 31st 2020: Early Registration.

May 1st 2020 – June 18th 2020: Registration.

June 19th – July 20th 2020: Late Registration.

<https://inobio-manera.fcav.unesp.br/index.php/shop/>

Resources, Environment and Regional Sustainable Development in Northeast Asia

Irkutsk, Russia, 25-28 August 2020

We cordially invite you to attend in the 5th International Conference "Resources, Environment and Regional Sustainable Development in Northeast Asia" to be held on August 25-28, 2020 in Irkutsk at the V.B. Sochava Institute of Geography Siberian Branch RAS.

The conference will be a platform for collaborative search for solutions to fundamental scientific issues in the field of optimal ecologically oriented nature management and the life of the population, sustainable development of transboundary territories and regions with close external environmental and socio-economic ties with the countries of North-East Asia. The conference will focus on changing natural complexes under the conditions of increasing anthropogenic impact at the global level, on preservation of the environment and the interaction of countries and organizations both in transboundary areas and in regions of joint socio-economic interest.

The items to be discussed during this joint session are as follows: the development and improvement of objective methods of processing

geographical information, new spatio-temporal models for the analysis and development of sustainable nature management strategies, green economy and regional development, geoinformation, remote and cartographic methods for analyzing and presenting data on the current state, temporal dynamics and transformation of natural and socio-economic systems. The thematic round table will focus on the issues of the current distribution and redistribution of water resources, their economic use, protection, environmental consequences associated with unsustainable nature management, and natural disasters.

Within this conference, we intend to establish new scientific contacts and strengthen existing cooperation in the field of territorial development, environmental protection and ecology to find common ground and constructive suggestions for the modernization of the regional economies, transport and social infrastructure, and realization of the principles of green economy and nature management. Scientific meetings with the participation of invited lecturers and experts, thematic discussions of joint projects are scheduled to be held.

Main Directions of the Conference:

1. The role of the cross-border factor in the rational use of resources, environmental management and the formation of green economy.
2. Sustainable development of the regions of Northeast Asia under global change.
3. Transformation and dynamics of natural and natural-anthropogenic complexes and their components.
4. New methods and technologies for processing geographic information using remote sensing, GIS and mathematical modeling in research of environment and sustainable regional development.
5. The role of geographical education in modern concepts of sustainable development.

Within the conference, a round table focused on "Water Resources of Northeast Asia: Environmental and Economic Challenges of the Present" will be organized. We invite all interested parties to cooperation and participation in the discussion. The proposals for the round table schedule should be sent to the Organizing committee.

Conference dates:

08/24/2020 -arrival day

08/25/2020 - registration of participants, opening of the conference, plenary reports.

08/26-27/2020 - session work, round table

08/28/2020 -seminar for young scientists, closing of the conference.
Excursions

08/29/2020 -departure day

Conference Languages:

Russian and English

Text of abstract and application - English only
Text of presentation and poster - English only

Oral report - in English or Russian. English language is greatly preferred.

Forms of Participation:

- full-time participation (oral presentation or poster presentation and publication of materials);
- absentia participation (only publication of materials).

Conference abstracts will be published electronically by the beginning of the conference and will be placed in the RSCI citation database. Selected reports will be published as papers in the journal "Geography and Natural

Resources". An IOP special edition is planned to be published (only for full-time participants).

Check Dates:

02/29/2020 -deadline for applications and abstract submission

06/30/2020 -deadline for registration fee payment and hotel reservation.

Organizing Committee Applications and Abstract Submission:

1. Fill out the registration form and attach the text of the abstract on the Conference website <http://irigs.irk.ru/northeastasia2020/>
2. Pay the registration fee.

Registration Fee:

Foreign participants - RUB 2500 cash

Recreational Geography and Tourism Development Trends

Irkutsk, Russia, 21-27 September 2020

We invite you to take part in the 3rd international scientific and practical conference "RECREATIONAL GEOGRAPHY AND TOURISM DEVELOPMENT TRENDS". The conference is to be held in Irkutsk on September 21-27, 2020

Main Objectives of the Conference:

It is proposed to discuss topical issues of recreational geography, its place in the modern system of sciences and its role in the tourist and recreational development of territories.

Main Directions of the Conference:

1. The concepts of modern recreational geography and their practical implementation
2. Tourism and green economy

3. Tourism in territories with special nature management conditions
4. International tourism as a direction of sustainable development of North-East Asia
5. New methods of recreational geography

Science Committee

Chair Korytny Leonid Markusovich, Doctor of Geography, Chief Researcher, V.B. Sochava Institute of Geography SB RAS, Professor of Irkutsk State University, Irkutsk, Russia

Deputy Chair Evstropieva Oksana Vladimirovna, Candidate of Geography, Senior Researcher V.B. Sochava Institute of Geography SB RAS, Irkutsk, Russia

Program Committee

Chair Kotlyakov Vladimir Mikhailovich, Academician, Honorary Chairman of the Russian Geographical Society, Institute of Geography, Russian Academy of Sciences, Moscow, Russia

Conference Venue:

V.B. Sochava Institute of Geography SB RAS, Irkutsk, Russia

Conference Language: Russian and English

Forms of Participation:

- full-time participation (oral presentation or poster presentation and publication of contributions);
- correspondence participation (publication of contributions only).

To become a participant of the conference, you should submit an application by February 15, 2020 by filling out the registration form on the conference website

<http://irigs.irk.ru/tourism2020/en>

Publication. Before the conference, proceedings of the Conference submitted to the organizing committee by the participants by May 1, 2020 will be published.

Check Dates:

February 15, 2020 deadline for applications

May 1, 2020 deadline for submission of contributions (abstracts)

July 1, 2020 deadline for registration fee payment

Registration fee, including publication payment, coffee breaks, welcome dinner and excursion program (partially) is:

- Foreign participants – US \$ 100;
- Russian participants - RUB 2500;
- Correspondence participation (publication of contributions) - RUB 1000.

Submission requirements, information about the Conference program and events, as well as the registration fee payment details, will be presented in March 2020 in the second announcement to the submitters of the applications.

Organizing Committee Contact Information:

664033, Russia, Irkutsk, Ulan-Batorskaya St., 1,

V.B. Sochava Institute of Geography SB RAS

E-mail: irktour2020@gmail.com

Secretary of the Organizing Committee: Anna Bibaeva, tel. 8 924 545 7777 3

11th International Conference on Urban Climate

Sydney, Australia, 30 August to 3 September 2021

The **next International Conference on Urban Climate (ICUC-11)** will take place in Sydney, Australia from **August 30 to September 3, 2021**. The Board of the International Association for Urban Climate (IAUC) selected the team in Sydney with its proposal “Cities as Living Labs: Climate, Vulnerability, and Multidisciplinary Solutions”.

The University of New South Wales (UNSW) who will host ICUC-11 has also received support from the American Meteorological Society (AMS) Board on the Urban Environment (BUE) to run ICUC-11 together with the Symposium on the Urban Environment (AMS-BUE). UNSW will collaborate with other Australian Universities and Research Institutes in hosting this conference.

Dr. Negin Nazarian, who leads the organising committee, welcomes the ISB community to Sydney: “We truly believe that Sydney is an ideal venue for bringing in the diverse and international urban climate and biometeorology community, and look forward to welcoming all members in Sydney, Australia, for the 11th International Conference on Urban Climate (ICUC-11) in 2021.”

ICUC-11 is excited to engage with the ISB community in the development of biometeorology focussed sessions at the conference.

If you have any questions about ICUC-11 please contact the conference co-chairs- Negin Nazarian n.nazarian@unsw.edu.au and Melissa Hart melissa.hart@unsw.edu.au

