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Compiled by Elena Grigorieva and Jennifer Vanos

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A Message from the President

Marie R Keatley

Dear Colleagues,

I hope this finds you well.

In this triennium several themes have emerged from the Executive Board – these have been working towards a more diverse Society, benefits to members, increasing membership and governance.

One area where these have coalesced is in the new membership fee structure. When you renewed your membership, you will have noticed that ISB membership fees are now based on World Bank categories. This we hope will further enhance membership of the Society from Biometeorologists world-wide.

The benefits of your ISB membership as you know extend beyond access to the Journal, they also include reduced rates for ISB conferences and conferences with Societies such as the European Meteorological Society. Additionally, the Executive Board is also examining re-establishing the annual small funding round to support members to attend conferences and/or workshops that align with the Society's purposes.

If you have any ideas that you believe would improve the Society, please contact any member of the Executive Board.

Kind regards

Marie.

Report on the Seventh International Conference on Climate, Tourism and Recreation – CCTR2022, March 29-30, 2022, Virtual

CCTR 2022, organized by the Commission on Climate, Tourism and Recreation of the ISB, in collaboration with the University of South-Eastern Norway, Campus Bø, School of Business, and Centre for Sustainable Transition, was successfully gathered on March 29-30 as a virtual event. During the consecutive sessions of the two days; three keynote speeches and 22 presentations met an online audience. The presented themes were diverse with specific topics on climate/weather-tourism/recreation models to common sustainability issues and the keynotes covered state-of-the-art research on Arctic cruise tourism (Julia Olsen, Nordland Research Institute, Norway), weather/climate effects on aviation (Paul Williams, University of Reading, UK) and lessons from the pandemic for a more sustainable (or not) tourism (Carlo Aall, Western Norway Research Institute). During the closing remarks, the Commission announced a call for papers for a special issue of the International Journal of Biometeorology open for presenters.

The Commission sincerely thanks this year's hosts Martin Falk, Guðrún Helgadóttir and their team from the University of South-Eastern Norway for their hard efforts. This was the first time the CCTR was realized with a one year gap (previously there was a minimum three years gap), and encouraged by the participation, the Commission considers the eighth event to take place in 2023 and is eager to receive hosting requests. So far, colleagues in Canada have mentioned their interests to organize CCTR 2023.

CCTR 2022

3 Keynotes & 22 Presentations (8 consecutive sessions)

<i>Event</i>	<i>Year, Month</i>	<i>Presentations</i>	<i>Submissions</i>	<i>Place</i>
1 st CCTR	2001 October	18	Full texts	Halkidiki, Greece
2 nd CCTR	2004 June	28	Full texts	Crete, Greece
3 rd CCTR	2007 September	41	Full texts	Alexandroupolis, Greece
4 th CCTR	2015 September	38	Ext. abstracts	Istanbul, Turkey
5 th CCTR	2018 June	28	Abstracts	Umeå, Sweden
6 th CCTR	2021 March	39	Ext. abstracts	Zoom & gather.town
7 th CCTR	2022 March	22(25)	Abstracts	Zoom (USN.no)
8 th CCTR	?		?	?

Information provided by:

Cenk Demiroglu, the Arctic Research Centre at Umeå University, Sweden

Martin Falk, University of South-Eastern Norway, Norway

“Environmental hypertensiology – the effects of seasonal changes on blood pressure and global risk”, Zagreb, Croatia

Croatian Hypertension League and Croatian Hypertension Society under umbrella of the Croatian Academy of Sciences and Arts organized an international symposium „Environmental hypertensiology – the effects of seasonal changes on blood pressure and global risk“. This hybrid meeting was organized on April 21, 2022. More than 220 participants attended and learned listening 28 lectures and fruitful discussions. After introductory lectures on the importance of the topic, Nobel laureates in research on climate change, research on health protection from the risks posed by heat waves, seasonal variations in blood pressure, mortality and the impact of

weather on COVID-19, lectures covered five basic topics. Seasonality was addressed in terms of children and adolescents, blood pressure, chronic kidney disease and pregnancy, metabolic changes and global risks as well as stroke and heart attacks. The main aim of this symposium was to underline importance of the topic and increase awareness among physicians, medical students and nurses. In addition, newspapers and other media spread this information to general population.

The whole symposium i.e. all lectures and discussions will be placed on the educational platform of the Croatian Society of Hypertension and physicians, nurses, but also general population will be invited to visit this page, to learn and to inform their relatives, neighbours and business partners. In addition, Croatian Hypertension League and eMed will use social networks to educate population more about this growing problem. It was decided that all speakers and moderators, who are Croatian key opinion leaders in the field, would prepare a consensus document as one of tools we will use in negotiation with our government. The whole program of the meeting can be found on <https://hdh.emed.hr/vijesti/228/medunarodni-simpozij-klimatske-promjene-arterijska-hipertenzija-i-ukupan-rizik--pridruzite-nam-se>



Information provided by:

Lidija Srnec, Croatian Meteorological and Hydrological Service

Bojan Jelaković, Croatian Hypertension League and Croatian Academy of Sciences and Arts

The European State of Climate (ESOTC) 2021

The European State of the Climate (ESOTC) 2021 is the fifth in a series of reports, typically released in April each year, which includes a short overview of the global climate and its changes during the most recent year as well as a more comprehensive overview of conditions in Europe.

The report is the one and only providing a detailed analysis on trends in human heat and cold stress from 1979 to present in Europe:

<https://climate.copernicus.eu/esotc/2021/heat-and-cold-stress>

It also contextualize such a trend from the perspective of extreme climate events, such as the heat wave that effected Southern Europe in July 2021:

<https://climate.copernicus.eu/esotc/2021/mediterranean-summer-extremes>

The report also offers insights on phenology, with an in-depth description of the late spring frost that brought widespread damage to vegetation across western and central Europe in early April 2021:

<https://climate.copernicus.eu/esotc/2021/late-spring-frost>

We believe it represents an important resource for the biometeorology community in Europe and beyond too. The ESOTC 2021 largely relies on global datasets provided operationally and in near real-time for free and to all by the Copernicus Climate Data Store. As such it has the potential to be replicated for other regions in the world.

Information provided by:

Dr Claudia Di Napoli, Postdoctoral Research Fellow, University of Reading

Visiting Scientist, European Centre for Medium Range Weather Forecasts

Twig-Cutting experiment – Information from China

Plant phenology is one of the most sensitive indicators of climate change. In recent decades, global warming largely advanced plants' spring phenology, which exerted significant effects on global/regional carbon and water cycles, and also provided corresponding reaction to climate systems. However, the temperature sensitivity of spring phenology (S_T , advanced days per degree warming) decreased with global warming, yet the spatial difference of S_T was still unclear for lacking of large-scale manipulative experiments.

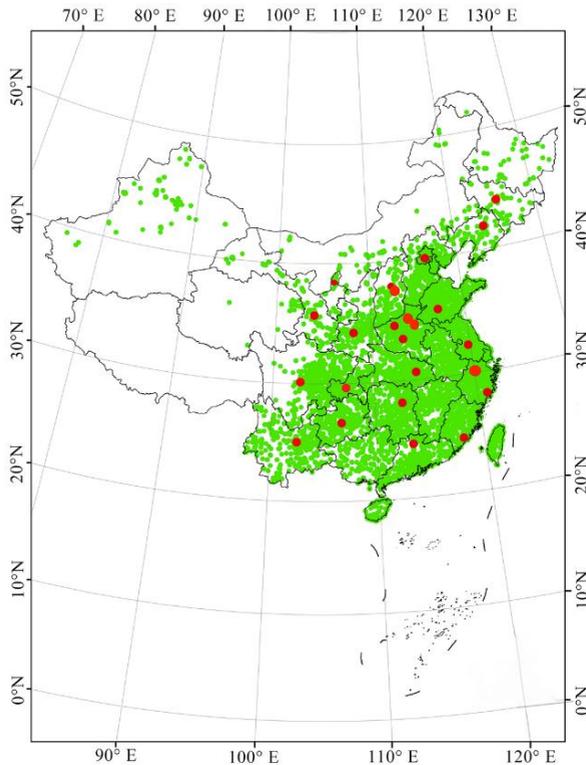


Fig.1 Spatial distribution of the collection sites.

Ginkgo (*Ginkgo biloba*), the so-called living fossil, is one of the most ancient tree species around the world, which has survived for 300 million years, making it a precious material for investigating plant evolution and development, and also an important model plant for climate change research. In winter 2021/2022, cooperated with as many as 26 Chinese universities, Yongshuo Fu, a professor in Beijing Normal University, led his team to conduct the world's largest spatial-scale twig-cutting experiment. (24.5 – 43.8°N, 104.0 – 125.3°E, Figs.1-2). The research field covers subtropical monsoon climate zone, temperate monsoon climate zone, temperate continental climate zone and arid/semi-arid climate zone in China.



Fig.2 Students from 26 Chinese universities are collecting the experimental twigs



Fig.3. Processing of the twig-cutting experiment

Taking the dormant ginkgo twigs as experimental materials (Fig.3), this experiment aims to investigate the response mechanisms of spring phenology to temperature and photoperiod as well as its spatial differences by setting different temperature and photoperiod gradients in climate chambers (Fig.2). The results help to find solutions to such questions as the spatial difference in S_T of spring phenology, the spatial differences of the interactive effect between temperature and photoperiod on spring phenology, which provide a theoretical basis to understand the response mechanism between spring phenology and climate change. In addition, this experiment is also an important attempt among citizen science, greatly raising the citizens' awareness of the urgency of mitigating climate change, especially the awareness of the coming generations. At present, the experiment is under processing, the data is being collected and the results are on the way and any critical analysis are welcomed.

Information provided by:

Prof. Yongshuo Fu, Beijing Normal University, China

Upcoming Conferences

Our 23rd International Congress on Biometeorology is scheduled for May 14–17, 2023 in Phoenix, Arizona, USA! Save the Date. More information to come. Please view video here: <https://uwm.edu/biometeorology/congress/>

Phenology 2022 ‘Phenology at the crossroads’: 20 - 24 June 2022 Avignon, France

Website: <https://pheno-2022.colloque.inrae.fr/>

First Brazilian Workshop on Human Biometeorology, July 4-8, 2022, Natal, Brazil

Website: <https://sigeventos.ufrn.br/evento/SBBH2022/principal/view>

European Meteorological Society Annual Meeting 2022: 5-9 September 2022, Germany

Website: <https://www.ems2022.eu/>

European Meteorological Society Annual Meeting 2023: 3–8 September 2023, Slovakia