



CONTENTS

1. Commissions and Study Groups
2. 21th International Congress of Biometeorology
3. SNP Workshop
4. Tromp Fund Report
5. Conferences and Courses
6. Members' Publications
7. Congratulations
8. Calling all reviewers
9. Contributors

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ISB: REPORTS FROM COMMISSIONS AND STUDY GROUPS

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Argentina

Email: silvia_valtorta@yahoo.com.ar

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Email: dquesada@stu.edu

Dr. Dr. Sheila Tavares Nascimento, State
University of Maringá, Maringá, Brazil,

Email: sheila_tn@terra.com.br

Climate and Human Health

Co-Chairs:

Dr. Pablo Fernandez de Arroyabe, University
of Cantabria, Santander, Spain,

Email: pablo.fdezarroyabe@unican.es

Dr. Adam J. Kalkstein, United States Military
Academy, West Point, USA,

Email: Adam.Kalkstein@usma.edu

Climate and Health Commission has participated through one of its chair in the organization of a special "Session on Global Change and Biometeorology" in the 33rd International Geographical Union (IGU) meeting that took place in Beijing from 21-25 August 2017. Several communications were presented in this session in the field of Human Biometeorology among different biometeorological topics.

<http://www.igc2016.org/dct/page/1>

Some active members of the Commission such as Dr. Cho Lam has recently published his PhD thesis on outdoor thermal comfort in the Melbourne botanic gardens which can be accessed it at:

https://figshare.com/articles/Landscape_variability_of_Melbourne_s_botanic_gardens_and_visitor_thermal_comfort/4757113

A second publication from Cho Lam is related to how thermal comfort is perceived under heat waves and non-heat waves conditions by people in Melbourne, Australia.

One of the Commission members, Fabio Luiz Teixeira Goncalves, is working on a new research Project titled "*Human biometeorology: analysis of the environmental variables (meteorological, thermal comfort and air pollution) and climate change on geriatric population of São Paulo city*". This is a multidisciplinary Project, which emphasizes geriatric population impacts, i. e., over 65 years old, of meteorological variables associated to human thermal comfort, and concerning to the real climatology and climate change in the Metropolitan Region of São Paulo. The aim of this study is to evaluate the cognitive and physical performance of a geriatric population in a pre-selected group of aged people which are considered as capable (healthy). This performance is affected by environmental conditions which thermal comfort (where meteorological variables act together) and air pollution are the meteorotropic ones. Consequently, one of the aims of the study is to establish a human thermal comfort index for geriatric populations. An acclimatized chamber will be used to simulate the extremes of São Paulo climate and to propose a thermal comfort index. Indoors (chamber) and outdoors will be used in order to compare the impact on the selected aged people. Finally, the climate change, which will be based on GCM's global models which show the meteorological variations to calculate their impact on a comfort index, the physical and cognitive

performances and architectural premises (thermal performance and ergonomics)

Prof. Fabio is also developing a very interesting research on the field the impact of environmental risk factors on cardiovascular and respiratory mortality in Los Angeles County for the period 1975-2005 in collaboration with the UCS in California.

The development of Biometeorological Early Warning Systems is confronting a new era where technological devices and digital information are becoming essential to alert people. A new research line linked to the development of Big Data and Biometeorological Data Infrastructures has been presented in a book chapter developed by Dominic Royé and Fdez-Arroyabe in relation to Internet of Things and Big Data development for the next Generation Healthcare.

Research articles:

Lam, C.K.C., Gallant, A.J.E. and Tapper, N.J. (2016), 'Perceptions of thermal comfort in heatwave and non-heatwave conditions in Melbourne, Australia', *Urban Climate*, doi: <http://dx.doi.org/10.1016/j.uclim.2016.08.006>

Zacharias S, Koppe C, Mücke H-G (2014): Influence of Heat Waves on Ischemic Heart Diseases in Germany. Journal 'Climate'; Special issues 'Climate Impacts on Health, (3) 2, 133-152; doi:[10.3390/cli2030133](https://doi.org/10.3390/cli2030133)

Zacharias S, Koppe C, Mücke H-G (2015): Climate change effects on heat waves and future heat wave-associated IHD mortality in Germany. Journal 'Climate'; Special issues 'Climate Impacts on Health, (3) 1, 100-117; doi:[10.3390/cli3010100](https://doi.org/10.3390/cli3010100)

Sheridan, S. C. (2007). A survey of public perception and response to heat warnings across four North American cities: an evaluation of municipal effectiveness. *International Journal of Biometeorology*, 52(1), 3-15.

Pezzoli A., Davila J.L.S., d'Elia E. (2016). Climate and Human Health: Relations, Projections, and Future Implementations. *Climate*, 4, 18, 1-7, doi: 10.3390/cli4020018

Book chapter

Fdez-Arroyabe, P. & Roye, D. (2017) Co-creation and Participatory Design of Big Data Infrastructures on the Field of Human Health Related Climate Services. Bhatt, C.; Dey, N. & Ashour, A. S. (Ed.) *Internet of Things and Big Data Technologies for Next Generation Healthcare*, Springer International Publishing, 2017, 199-226

http://link.springer.com/chapter/10.1007%2F978-3-319-49736-5_9

Submitted by Pablo Fdez-Arroyabe

Climate, Tourism, and Recreation:

Chair:

Prof. Dr. Chris de Freitas, The University of Auckland, Auckland, New Zealand,
Email: c.defreitas@auckland.ac.nz

Tourism climatology past and present: A review of the role of the ISB Commission on Climate, Tourism and Recreation

(paper to be published in special issue of the IJB)

Abstract. The Executive Board of the International Society of Biometeorology (ISB) founded the Commission on Climate, Tourism and Recreation CCTR at the 15th International Congress of Biometeorology in Sydney, Australia in 1999. The aims of the CCTR are to bring together researchers from around the world to critically review the current state of knowledge in tourism and recreation climatology and explore possibilities for future research. Almost two decades on, research in tourism climatology has developed and expanded due in large part to the initiatives and activities of the CCTR and several collaborative research projects run under the auspices of the CCTR. Recent CCTR meeting highlighted the fact that, although climate is an essential part of the resource base for

tourism, which is one of the world's biggest and fastest growing industries, relatively little is known about the effects of climate on tourists' choices and broad demand patterns, or the influence climate has on the commercial prospects and sustainability of tourism operators and destinations. The work reviews what has been done, its conceptual underpinnings, and current research frontiers.

Submitted by C. R. de Freitas, Chair of the ISB Commission on Climate, Tourism and Recreation

Phenology

Chair: Prof. Mark D. Schwartz, University of Wisconsin-Milwaukee, Milwaukee, USA,
Email: mds@uwm.edu

Vice-Chairs:

Dr. Xiaoqi Chen, Peking University, Beijing, China, Email: cxq@pku.edu.cn

Dr. Elisabeth Koch, ZAMG, Wien, Austria,
Email: elisabeth.koch@zamg.ac.at

Students and New Professionals

Chair: Dr. Jenni Vanos, Texas Tech University, Lubbock, USA, Email: jennifer.vanos@ttu.edu

21ST INTERNATIONAL CONGRESS OF BIOMETEOROLOGY



ICB2017 Congress Theme: Weather and Climate Information for Risk Management
<http://community.dur.ac.uk/icb.2017/>

Atmospheric processes exert a strong influence on a range of human activities, ecosystem services and hence human development. Accordingly, there is now a

demand from a variety of sectors for weather and climate information. In many ways this has led to the emergence of climate risk management (CRM) as a distinct field of pure and applied research. A clear manifestation of the global recognition of the potential significance of climate information for risk management is the establishment of the World Meteorological Organization's Global Framework for Climate Services (GFCS).

Theoretically through developing and incorporating science-based weather and climate information and prediction into planning, policy and practice, better management of the risks and opportunities arising from climate variability and change will be enabled. However the question remains "what type of weather and climate information and for whom". Given this, the purpose of ICB2017 will be to reflect upon the efficacy of knowledge production in biometeorology and cognate disciplines in relation to information provision for managing weather and climate related risks. It is expected that such a theme will attract papers from a wide range of science, social science, medical and health disciplines that are likely to touch upon improved methods for describing the nature (probability, magnitude, location) of climate events, weather and climate impacts on society, developments in the assessment of exposure and vulnerability to climate extremes, how climate anomalies may propagate through socio-ecological systems, the evaluation of risk management decision support tools, barriers to the uptake of weather and climate information and current scientific limitations related to the production of the requisite weather and climate information for climate risk management.

The Venue

ICB2017 will be held at Durham University, located in the City of Durham in the North East of England.

Durham is a small and compact city. Everything is within easy walking distance – it is essentially a university town with a population of 47,000 with the University accounting for a third of that total. The average daily maximum temperature in June - September is 18.5°C.

DU has excellent facilities including a world class library, wireless internet across the campus and state of the art meeting and lecture rooms.

The following links will take you to Information about Durham University <https://www.dur.ac.uk/> and the City of Durham <http://www.thisisdurham.com/>

Transport Links to Durham

Durham is located in the heart of the North East of England, 264 miles north of London. It has excellent accessibility from across the UK, Europe and beyond. Durham is 30 minutes from Newcastle International Airport, which offers connections to London Heathrow and Gatwick airports and a range of European and other destinations. 60 InterCity trains from most major centres in the country call at Durham daily including 14 trains from London and Edinburgh.

Congress Programme

The Congress will run between September 3 and 6, 2017 with optional tours to places of interest in the “North East” planned for September 7, 2017.

September 3: Registration from 1600hrs and Icebreaker event at Durham Castle 1800 – 2000 hrs

September 4 - 6: Paper sessions 0830 – 1800 hrs.

September 4 (evening): Congress Dinner at Grey College (optional extra)

September 7: Post- Conference tour to Lindisfarne (Holy Island): <http://www.english-heritage.org.uk/visit/places/lindisfarne-priory/>

Remaining Important Dates

March 1st - April 30th, 2017: Assessment of paper and poster abstract submissions

May 1st 2017: Notification of acceptance or non-acceptance of papers and posters.

Registration

<http://community.dur.ac.uk/icb.2017/registration.html>

February 1 to July 31, 2017: Early Registration

August 1 to August 31, 2017: Registration

September 3 to September 6: Late Registration

Accommodation

An accommodation booking system will open in conjunction with the launch of the ICB2017 online registration system

Bed and Breakfast accommodation will be offered in a number of Durham University's Colleges namely Collingwood College, University College (Durham Castle) and Hatfield College. University accommodation rates on a bed and breakfast basis will range between approximately £32 and £45 per night for standard non-en-suite and en-suite rooms respectively in Collingwood College and up to £65 per night for an en-suite room in Hatfield or University College. Links to the websites for the various Colleges can be found here

Collingwood College:

<https://www.dur.ac.uk/collingwood/>

Hatfield College:

<https://www.dur.ac.uk/hatfield.college/>

University College:

<https://www.dur.ac.uk/university.college/>

A limited number of rooms have been reserved at the nearby Marriot Hotel (<https://www.marriott.co.uk/hotels/travel/xvudm-durham-marriott-hotel-royal-county/>)

for those wishing to not stay in University accommodation. These rooms will also be booked through the online accommodation booking system as part of the ICB2017 registration system

ISB STUDENTS AND NEW PROFESSIONALS WORKSHOP

On the first day of the ICB (Sunday, 3 Sept 2017), all Students and New Professionals (SNP) are invited to attend a workshop specifically for young/new members of the discipline. Several experienced panelists and speakers will discuss topics related to:

The Academic and Companies Job Search Potential for the publication of papers (how

to improve the quality of papers; discussions of the challenges for researchers from developed and developing countries)

Research (the challenges to stimulate research from undergraduate and graduate students)

What comes after being a student and a young professional? (challenges when you are in the middle - not a new professional and not yet achieving a consolidated career)

The workshop aims to stimulate the exchange and discussion of students and new professionals from different countries and realities, and to discuss how we can increase our participation and renewal of members within ISB.

The workshop will be held on the campus of Durham University on Sunday, 3 September 2017, 9:00 a.m. to 4:00 p.m. Lunch will be included. The workshop registration fee is £20. Please sign up and pay when you register for the congress online at <http://community.dur.ac.uk/icb.2017/registration.html>

A schedule for the SNP Workshop day will be provided to registered participants prior to the conference.

Contacts:

Sheila Nascimento sheila.tn@gmail.com or

Vinicius Fonsêca

vinicius_fonseca86@hotmail.com

TROMP FUND REPORT



The 33rd International Geographical Congress
Shaping Our Harmonious Worlds

21-25 August Beijing China

Key Topic: Climate change and global understanding
Session: Global Change and Biometeorology

1st ISB Regional Meeting for Asian Biometeorologists



Assistance to the 33rd International Geographical Congress organized by International Geographical Union (IGU/UGI) from 21st to 25th August 2016.

TTF was used to promote ISB at the 33rd IGU meeting through the proposal of a specific **Session on Global Change and Biometeorology** which was accepted by the IGU Organizing and Scientific Committees under the **Key Topic of Climate Change and Global Understanding**.

The **Session on Global Change and Biometeorology** took place at the National Convention Center in Beijing in the Room 212 B. It was proposed and conducted by Prof. Pablo Fernández de Arroyabe and Prof. Junhu Dai from the Chinese Academy of Science.

The Session on Global Change and Biometeorology was organized in three different parts which took place:

- Tuesday, August 23rd from 14:30 to 16:00

Submitted communications on this session were related different topics such as solar radiation and winter wheat yield; energy saving and carbon emission mitigation of cassava-based fuel; plant senescence reflectance index and remote sensing in inner Mongolian grassland; Changes on Lamb-Jenkinson circulation types in Hong Kong region and influenza outbreaks; carbon

footprint of four commercial daily production systems in Australia or shifts in China agro-climatic resources in relation to climate change.



Pablo Fdez-Arroyabe presenting at the International Geographical Union Session on Global Change and Biometeorology

- Tuesday, August 23rd from 16:30 to 18:00

The submitted communications for this sub-session were focused on climate warming and infectious diseases in western China; flowering duration and date differed in Alpine middle ecosystem in Tibet in relation to global warming and snow addition; water used efficiency and tree growth in a natural Alpine timberline in the Southeastern Tibetan Plateau; extreme climate conditions in Southwest Nigeria and its implications; a new method for Net Primary Productivity (NPP) estimation in Wuhan, China for the period 2001 to 2010 was also presented.



Some of the researchers presenting at the Geographical Union Session on Global Change and Biometeorology

- Wednesday, August 23rd, from 08:00 to 09:30

Last sub-session consisted on five talks on autumn phenological shifts and its responses to climate change in the Tibetan Plateau; climate change impacts on oil palm yields in Nigeria Niger delta; changes in flowering phenology in wood plants in North China; variations of leaf phenology sensitivity to temperature in Northeast China; hospital admissions related to diagnostics and CWT in the Iberian Peninsula.

Moreover, three more submitted communications were accepted for being presented in the Poster Session. They were focused on the Korean human thermal sensation for beach tourism; quantitative evaluation of agro-meteorological distress in China; seasonal plant cover dynamics of degraded grassland in Inner Mongolia recorded by photographic techniques.

More information about these presentations and corresponding authors can be found at the International Geographical Union Abstracts Book or in the IGU website <http://www.igc2016.org/>

Finally, during the IGU event, information on the International Society of Biometeorology (ISB) activities and Commissions was also facilitated to many other researchers in different sessions (Environmental Health) by the co-chairs of the Session on Global Change and Biometeorology and special promotion of the next ISB Congress in Durham (England) was developed.

Submitted by Pablo Fdez-Arroyabe

CONFERENCES AND COURSES

42nd World Congress of the International Society of Medical Hydrology and Climatology

Between June 5th -8th, 2017 the 42nd World Congress of the International Society of Medical Hydrology and Climatology (ISMH) will be held in Moscow for the first time <http://congress42.moscow/>. ISMH is a prestigious non-profit scientific society, founded in 1921.

It is the world's leading research organization for medical hydrology and climatology. Russian Scientific Center for Medical Rehabilitation and Balneology of the Russian Ministry of Health and the International Society of Medical Hydrology and Climatology are the organizers of the Congress.

The program will be organized along the following topics:

- Biology (biochemistry, microbiology, physics, physiology)
- Geology
- Health benefit of thermo-mineral balneological modalities
- Specific balneological agents (Sulfur waters, Radon waters and gas, CO2 waters and gas, Saline/salty waters)
- Drinking mineral water / Hydropinia
- Balneological Inhalation therapy
- Mud Therapy / Peloids
- Climatherapy
- Thalassotherapy
- Practices and techniques in balneology
- Intermittent balneotherapy
- Complex spa therapy (balneological treatments plus health education, diet, exercise and others)

- New trends: prevention, public health, ageing, rehabilitation
- Safety (resources, products, treatments, patients)
- Drug consumption and balneology
- Cosmetological issues
- Laboratory and Clinical Research in Medical Hydrology
- Evidence Based Medical Hydrology
- Medical Hydrology Teaching (initial and continuous medical education)
- Managing the quality
- Political and Economic aspects: Cost Effect Studies, Balneology, Health Assurance and National Health Systems, Reimbursement

For any questions contact:

ismh2017@gmail.com

VII Brazilian Congress of Biometeorology, Ambience, Behavior and Animal Welfare "Environmental Responsibility and Innovation", July 30th – August 2nd, 2017

(www.sbbiomet.org.br).

The VII Brazilian Congress of Biometeorology, will be held between July 30th and August 2nd, 2017, in Jaboticabal, SP, Brazil, at the Convention Center of São Paulo State University (UNESP) College of Agrarian and Veterinary Sciences. This conference is intended for students (undergraduate and graduate), professionals, researchers, and professors in the fields based on the premise that Animal Production and Human Society must develop sustainable innovations for the Planet Earth.

The conference will scientifically contribute to the areas of Animal and Human Biometeorology, Ambience, Behavior and Animal Welfare, with discussions and presentations of scientific findings in several levels of academic degree (undergraduate and graduate students, researchers, and professors). In addition, participants will have the opportunity to acquire knowledge through

lectures by researchers of international renown. Universities and Researchers centers will have strength scientific links through contacts and networks between institutions. Researchers and young scientists will be encouraged by receiving awards named from prominent people in the areas of Biometeorology, Ambience, Behavior and Animal Welfare.

Abstracts can be submitted in the areas:

- Ambience and Animal Biometeorology
- Behaviour and Animal Welfare
- Human and Agricultural Biometeorology

EMS Annual Meeting: European Conference for Applied Meteorology and Climatology 2017, 4th – 8th September 2017, Dublin, Ireland

<http://www.ems2017.eu/home.html>

Session OSA2.8/ES1.7: Atmospheric effects on humans: Air quality, biometeorology, urban climate and UV-radiation

This session deals with the interactions between atmospheric conditions, human beings and the environment (ecosystems, materials) in an interdisciplinary manner as well as on how to warn, respond to and mitigate adverse effects resulting from human activities and climate change. The core questions are to assess how atmospheric conditions can impact the well-being and health of humans, how urban planning can improve atmospheric conditions (air quality, urban climate) and how to transfer such knowledge in a broadly understandable way in order to ensure the appropriate usage of such information. Atmospheric conditions include transient ones driven by weather patterns and long-term climatology as well as how climate change trends may affect these drivers.

In this context, the session will address issues concerning assessment approaches (incl. emission inventories) for urban climate (incl.

heat load and cold stress), air quality and health, as well as warning systems and measures in place to mitigate adverse impacts. Modelling and experimental studies on how environmental management, urban planning and design or traffic regulation can improve living conditions and decrease emissions are particularly welcome.

The session will consider the impacts of weather processes with respect to air temperature, air quality and radiation on human well-being and health. Since several methods are in use to compile bio-weather and air quality forecasts, we are looking forward to discussing such approaches and the way to convey such information to end-users and the public, but particularly to special target cohorts. Another aim is to describe ways, how climate and air quality data and information should be transferred and addressed for issues on tourism and recreation but also for people living in urban areas.

The session will also address efforts to combine the different environmental impacts on humans into one single index, as it is well known that humans react to the whole mix of atmospheric stimuli. The aim is to improve the requested information and to look for more efficient ways of conveying the message on a regular basis in order to enable authorities and citizens to make the best use of such information in their everyday activities.

The session can also serve as a dissemination forum for relevant projects, including the Copernicus Atmosphere Monitoring Service CAMS, COST Actions, GAW/SAG-GURME, as well as national- and European-scale consortium projects. Please do contact the conveners if you wish to organise a compiled distinctive component in the session.

Workshop on Mathematics Applications in Biometeorology Santa Maria Key, Villa Clara, Cuba October 24 – 26, 2017

(Email address to contact: cipi@uclv.edu.cu)
Organized by: Universidad Central de Las Villas, Cuba <http://www.uclv.edu.cu>

Aim and Scope: The Central University "Marta Abreu" of Las Villas, institution with excellent performance in the High Educational System of Cuba, has the honor of inviting investigators, academic, managers, decision-makers and other specialists, working to preserve and to reach a sustainable development, to the International Convention of Science, Technology and Society. Perspectives and Challenges. This event will be hosted in the tourist pole to the north of Villa Clara province, Cuba, between October 23 and 27, 2017.

Workshop will open an opportunity to develop cooperated activities between our International Society of Biometeorology and the Latin American Society of Biomathematics, seriously involved in mathematics outputs for biometeorology, human health and epidemiology into the region. Also the Workshop will be an excellent framework to enhance cooperation with international health organizations in the region, such as PAHO and WHO, in order to promote real solutions for significant unsolved challenges on how national health services can deal with abrupt changes of regional climate or weather patterns.

Submission Topics:

- Modelling spread of infectious diseases and other epidemiological challenges.
- Early detection and forecast of meteor-tropic effects based on biomathematics outputs, methods or procedures.
- Modelling future climate scenarios for agriculture, human and animal health implications.

- Applications for developing 2nd generation of biometeorological forecast.
- Objective risk evaluation for epizooties occurrence and its prevention.
- Biomathematics applications in phenology and agrometeorology (prevention of plagues and diseases).
- Biomathematics fundamentals of heat balance calculations for human and animal body comfort, under different climate and weather conditions.
- Thermal comfort and therapeutic procedures for Climatotherapy and health tourism.
- Objective evaluation and prevention of weather impacts on human activities.

Important Dates

May 15, 2017 Paper submission deadline
June 30, 2017 Acceptance notification
August 30, 2017 Camera-ready version
October 24-26, 2017 Workshop activities

Submission guidelines Paper submission have been available since March 1st, 2017 via EasyChair. Please use this link to submit your paper:
<https://easychair.org/conferences/?conf=isfur-os2017>

Workshop Scientific Committee and Coordinators:

Dr. Luis B. Lecha Estela
(luis.lecha@gmail.com)

Dr. Paulo L. Ortíz Bultó
(ortiz.paulol@gmail.com)

**INTERNATIONAL CONVENTION 2017
Science, technology and society.
Perspectives and challenges**

October 23-27; 2017, Universidad Central
"Marta Abreu" de Las Villas, Cuba

**"Sustainability of the world of the future, a
responsibility of the Sciences"**

The Universidad Central "Marta Abreu" de Las Villas, Institution of Excellence in Cuban Higher Education System, has the privilege to invite researchers, academics, business people, government decision-makers and other experts around the globe; who work to preserve and achieve a sustainable development, to the International Convention on Science, Technology and Society: Perspectives and Challenges.

Main thematic areas: Production of animal and human food. Automation and informatization of society. Sustainable energy development, by promoting efficiency, savings and renewable sources. Adaptation to climate change. Territorial and urban organization. Construction. Sustainable use of natural resources, emphasis on water. Cuban society, Cuban economy and international relationships. Biotechnology, medical-pharmaceutical production and vaccines. Research in exact and natural sciences. Research in nanotechnologies. Improvement of education. Physical activity and recreation. Local development. Tourism

Important dates. Delivery of abstracts to be reviewed until April 23, 2017, in PDF format. Official acceptance notification, from May 23, 2017 on. Final delivery of the acceptance papers shall be up to August 23, 2017, in PDF format.

Contacts: Executive secretary

convencionuclv@uclv.cu

secretariaejecutivaucv2017@yahoo.co

Phenology 2018 Conference:



One Planet, Two Hemispheres, Many Regions will be held in Melbourne, Australia, September 23rd – 27th 2018, under the leadership of the ISB Phenology Commission.
<http://phenology2018.com.au/>

Sponsors:



Keynote Speakers:

Dr Kjell Bolmgren, Coordinator of the Swedish National Phenology Network, Swedish University of Agricultural Sciences

Prof Irene L Hudson FRSS, Department of Statistics, Data Science and Epidemiology, Swinburne University, Melbourne, Vic

Prof. Dr. Marcel E Visser, Head of Department, Department of Animal Ecology, Netherlands Institute of Ecology, Wageningen.

Planned Sessions:

- Agricultural Phenology,
- Aerobiology,
- Phenology and Conservation Biology,
- Phenology and Citizen Science,
- Phenological Methods,
- Remote Sensing,
- Phenology and Marine Science,
- Traditional Ecological Knowledge,
- Urban Phenology,
- Open Session

Members' Publications

Publications listed here are peer reviewed and only those published since the previous Bulletin.

Middel A, Lukasczyk J, Maciejewski R (2017) Sky View Factors from Synthetic Fisheye Photos for Thermal Comfort Routing—A Case Study in Phoenix, Arizona. *Urban Planning* Vol 2 (1)
<http://www.cogitatiopress.com/urbanplanning/article/view/855>

Congratulations

ISB member Minh Phan was awarded a Young Leaders in Climate Change (YLCC) internship for summer 2017. He will be working with park officials and visitors at Fire Island National Seashore in Patchogue, New York to develop tools and resources to educate park visitors and park staff on how climate change and events like Hurricane Sandy impact this coastal barrier island.

The George Melendez Wright Initiative for Young Leaders in Climate Change (YLCC) is a program funded by the NPS Climate Change Response Program and managed by the University of Washington College of the Environment. The YLCC program provides paid summer internships to highly accomplished undergraduate and graduate students and recent graduates to work on diverse issues related to climate change and its effects in national parks.

Reviews

To date no members have taken up this offer.

The Society in conjunction with Springer is offering members the opportunity to review the new books in the broad area of

Biometeorology and have their review of 500 – 800 words published in the Bulletin. Once the review is published a print version will be supplied to the reviewer. A Springer Account is needed to access an Online Book Review Copy.

Could anyone who is interested please contact Marie Keatley mrk@unimelb.edu.au or

Elena Grigorjeva eagrigor@yandex.ru first with the title they are interested in. This is so we can liaise with Springer.

Contributors

Many thanks to everyone who forwarded information to be included in the Bulletin.

Pablo Fernández de Arróyabe Hernáez,
Depto. de Geografía, ETSI Caminos,
Universidade de Cantabria, Spain

Luis Bartolomé Lecha Estela, Center for
Environmental Research and Services of Villa
Clara, Cuba

Chris R. de Freitas, School of Environment,
University of Auckland, New Zealand

Glenn McGregor, Dept. of Geography,
Durham University, Durham, United Kingdom

Andreas Matzarakis, Head, Research Centre
Human Biometeorology, German
Meteorological Service, Freiburg, Germany

Ariane Middel, School of Geographical
Sciences and Urban Planning, Arizona State
University, Tempe, AZ, USA

Minh Phan, Department of Geography, East
Carolina University, Greenville, NC, USA

Jennifer Vanos, Texas Tech University,
Lubbock, USA

Dear ISB members,

We are preparing for the next issue of the ISB Bulletin. Please provide us with any information you may have on upcoming conferences, workshops or other relevant ISB-related events or activities.

Editors,

Elena Grigorieva eagrigor@yandex.ru

and

Marie R. Keatley mrk@unimelb.edu.au