E The International **M E TRIC S Society - TIES**

Newsletter

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1. A Message from the President, Don Stevens (stevens@science.oregonstate.edu) Department of Statistics Oregon State University, USA

Dear TIES members,

For the main topic of my first letter as TIES President, I have a serious issue to discuss. I hope you will take the time to read this letter, and I encourage you all to respond with suggestions and comments. Our actions over the next several months will have a significant impact on the future of TIES.

A bit of history first. After several years of discussions, TIES chose to affiliate with the International Statistical Institute (ISI). As I recall, much of the discussion concerned the potential benefits and drawbacks of affiliation with ISI. Major concerns included the long term viability of TIES as an independent organization, and the financial cost of affiliation with ISI. There was hope that affiliating with ISI would lead to an increase in TIES membership. Furthermore, ISI offered to provide some administrative services to TIES, especially management of membership lists and dues.

TIES' income is primarily from dues paid by members, although we do show some profit from the annual conferences. TIES offers several classes of membership with different dues. For example, members from developed countries paid 30€ in 2011, and student membership was free. Also, persons who attend a TIES conference are offered reduced registration fees if they join TIES. Many who take advantage of that offer do not continue as members. The upshot is that determining the number of TIES members is not straightforward. Depending on how the count is made, TIES has somewhere between two to three hundred members, with about one hundred of those being student members. Thus, we have approximately two hundred dues-paying members.

In May of 2011, TIES received from ISI what amounted to a bill for services from the ISI Permanent Office for an amount in excess of $10,300\in$. In addition, TIES was charged a membership administration fee of $10\in$ for every TIES member (including students, who pay no membership fees) who was not also an ISI member. With 200 dues-paying members, that works out to be over $60\in$ per member. It is impossible for TIES to meet these costs with our current dues structure.

The issue of the costs of remaining associated with ISI was discussed at length at the TIES Annual General Meeting (AGM) in Dublin. Several suggestions were made, including increasing dues, and finding other sources of revenue. Most of the other ISI Associations derive some income from their official journals. Under the current agreement with Wiley, TIES derives no income from Environmetrics. It was suggested that the contract be re-negotiated. There was also a suggestion that if Wiley was not willing to share some revenue from *Environmetrics*, then TIES should withdraw our support of Environmetrics as the official journal of TIES and start a new on-line journal. No resolution was reached, although dues were increased by 5€.

The continued association of TIES and ISI will be discussed at the upcoming TIES 2012 conference in Hyderabad, India, January 3-6, 2012. In the meantime, I encourage every member to send your thoughts, suggestions, and ideas for revenue generation to me, especially if you cannot attend TIES 2012 in person.

On a happier note, ISI has or soon will announce a change in membership policy. ISI will start with the promotion of the ISI Regular Membership. Regular Membership is a new membership option, approved by the ISI General Assembly in Dublin in August 2011. Regular Membership is open to everyone who shares the values and objectives of the ISI.

Historically, ISI members have gone through an elections process where people are assessed for their contributions to the statistical field. Regular Members can join without such an assessment. Regular Membership is especially suitable for people who are less advanced in their statistical careers, students or users of statistics. Applications for the year 2012 can already start in December 2011. More information about this new type of membership will appear on the ISI website soon (http://isi-web.org/).

As mentioned above, TIES 2012 will be held in Hyderabad, India, January 3-6, 2012. The following year, 2013, promises to be an interesting year, with ISI's World Statistics Conference (WSC) slated for August 25-30 in Hong Kong, China. Quanxi Shao, in cooperation with the Chinese Society of Environmental Resource Statistics, and is considering organizing a satellite Regional TIES meeting to the WSC 2013. TIES 2013 will be held in Anchorage, Alaska. We do not a firm date yet, but will try to schedule the meeting near the summer solstice, when Anchorage has 24 hours of functional daylight.

2. TIES News

2011 New TIES Board of Directors

There is a new Board of Directors with TIES officers voted in from the election of June 24, 2011. The representatives voted in assumed their respective positions September 1, 2011. Thank you to all nominees who participated in the election, to the Elections Committee (Daniela Cocchi, Ray Correll, Ian Mac Neill) and to all members who voted. See Section 7 for a listing of the current Board of Directors.

Forthcoming papers in Environmetrics

For forthcoming articles to be published in the society journal Environmetrics, please visit the following link

http://onlinelibrary.wiley.com/journal/10.1002/%28I SSN%291099-095X/earlyview

TIES members have the opportunity to download Environmetrics papers for free from the Wiley webpage. A username and password are required to make use of this opportunity; please email m.deruitermolloy@cbs.nl to obtain these details.

3. Environmetrics Conferences

3.1. Forthcoming Conferences

Already announced

TIES 2012: 22nd Annual Conference of The International Environmetrics Society – Hyderabad, India, January 1-6, 2012

The 22nd TIES Annual Conference will be held in Hyderabad, India, over January 1-6, 2012, and is jointly organized by CRRAO AIMSCS, UOH Campus, and University of Hyderabad. The theme of the meeting will be "Environmental Challenges facing developed and developing countries in a Globalized World: Quantitative approaches to Comprehensive Solutions".

Contact: ties2012crr@gmail.com or tata.subbarao@gmail.com

For further information: http://www.ties2012.com

EMSs2012: 6th International Congress on Environmental Modelling and Software, Leipzig, Germany, 1 - 5 July 2012

The aim of the meeting is to enhance environmental processes understanding and decision making by fostering the discussion and interchange of challenges, solutions, ideas, new methods and techniques, and future research lines in environmental modeling and software. The congress will take place at the "Leipziger KUBUS", the conference venue of the Helmholtz Centre for Environmental Research - UFZ.

Important Dates

Call for papers (full paper) 15 January, 2012 Full paper submission 1 March, 2012

For further information: http://www.iemss.org/sites/iemss2012/

New Announcements

10th International Conference on Monte Carlo and Quasi-Monte Carlo Methods in Scientific Computing (MCQMC 2012) – Sydney, Australia, February 12-17, 2012

There will be a special session on ecological applications of Sequential Monte Carlo Methods at the Tenth International Conference on Monte Carlo and Quasi-Monte Carlo Methods in Scientific Computing (MCQMC 2012), to be held at The University of New South Wales in Sydney, NSW, Australia. There is an impressive list of special sessions and some good introductory Sunday tutorials.

Details of the conference, tutorials and special sessions can be found at:

http://www.mcqmc2012.unsw.edu.au/

3rd International Conference on Industrial and Hazardous Waste Management – Chania, Crete, Greece, September 12-14, 2012

The International Conference on Industrial and Hazardous Waste Management "CRETE 2012" will be held September 12-14, 2012 at Chania (Crete, Greece) for the third time.

This conference will focus on innovative aspects of Industrial and Hazardous Waste Management. Through several sessions and special workshops, CRETE 2012 will mainly focus on:

- Industrial and Hazardous Waste (regulation / legislation, characterization, management practices, production, minimization and recycling, treatment and disposal)
- Hazardous Waste Toxicology Risk assessment
- Treatment of Hazardous Waste landfill and Mine leachates
- Contaminant Release and Transport
- Toxic substances in the food Chain
- Management of Contaminated sites
- Special Topics on Environmental Management and Remediation (sediment sites – characterization and risk assessment, munition and explosives production sites, etc.)
- Radioactive Waste (management, environment, health and safety, nuclear explosions, etc.)
- Energy from Waste (biomass, oil sludge, gasification processes, syngas, etc.)
- Case studies
- Special Waste (medical, WEEE, agroindustrial, etc.)

The conference will include oral presentations, poster sessions, special sessions and workshops.

Important dates

The deadline for abstract submission is **31st January**, **2012**, which includes an extended abstract (at least one, but no more than two full pages), accompanied by the relative Abstract Form.

Full paper submission is due by **15th May**, **2012**.

Early registration ends 15th May, 2012.

For more information: www.hwm-conferences.tuc.gr

59th ISI 2013 World Statistic Congresses – Hong Kong

For the WSC 2013 in Hong Kong, the theme is "Youth". The objective of this day is to highlight the role of statistics in the world of the youth, i.e. statistics for the youth, the youth for statistics and statistics about the youth. Byeong U. Park and Delia North are co-organizing the Theme Day sessions and would like to invite a certain number of invited paper session proposals from each ISI Association, some of which are targeted toward young statisticians. Sessions may be related to youth in a broad perspective (e.g. aging, pension, economic crisis, etc.). However, the most important objective is to attract a general audience by making sessions special, different and exciting to everyone.

A session proposal should include:

(i) a description of the session with justification and objectives; and

(ii) the names, affiliations, contact email addresses of the speakers (4 or 5 speakers including a designated discussant).

Session proposals should be sent to Byeong Park (bupark@stats.snu.ac.kr, bupark2000@gmail.com) or to Delia North (Northd@ukzn.ac.za) by no later than January 8th, 2012.

Satellite Regional Meeting in conjunction with

WSC 2013. Quanxi Shao, in cooperation with the Chinese Society of Environmental and Resource Statistics, is also considering organizing a satellite Regional TIES meeting to the WSC 2013. Details to follow as they develop.

3.2 Meeting Reports

3rd North American Regional Meeting - La Crosse, Wisconsin, July 18-20, 2011 *Brian Gray*

TIES conducted its 3rd North American regional meeting in July 2011 in La Crosse, Wisconsin, a river town set on the upper Mississippi River. The theme of "Quantitative Methods for the Analysis of Long-Term Monitoring Data" was addressed by multiple invited and contributed sessions. Approximately 65 environmental scientists and statisticians attended the meeting. A highlight of the meeting was a banquet held during a cruise in a paddlewheel cruiser on the Mississippi River. Conference organizers included Sylvia Esterby, Brian Gray, Rob McRoberts, Wayne Thogmartin and Dale Zimmerman. Further information about the meeting may be found at http://www.uwlax.edu/conted/ties2011/invitedsession s.htm,

58th World Statistics Congress of the International Statistical Institute, Dublin, Ireland, August 21-26, 2011 Marian Scott

TIES, as part of the family of ISI, participated in the congress through the organisation of many sessions and especially through involvement in the Water Day. Theme Days are a new innovation of the ISI programme in which a specific theme is given prominence through plenary sessions.

TIES organised sessions included (but not limited to) topics such as statistical downscaling, sensor networks, environmental epidemiology, indicators and environmental accounting. There were also some special panel sessions, such as *The Role of Statisticians in Policy*, and a breaking news session on *Trust, Risk and Uncertainty*.

The Water Theme day was scheduled for the middle of the week with sections of ISI (including TIES) providing a broad and varied programme of 26 sessions on the theme of water, concluding with a water roundtable discussion. This was a very exciting day with so much to choose from and so little time to actually explore all the possible topics.

It is hoped that the Theme Day brought many people to the conference and highlighted the key role that good statistics and statistical modelling must play in protecting this vital global resource.

2nd conference on Spatial Statistics 2011: Spatial Data Methods for Environmental and Ecological Processes, TIES European Regional Conference – Foggia and Baia delle Zagare, Italy, September 1-2, 2011 Daniela Cocchi

The Conference had 150 participants and was comprised of 10 plenary presentations, 47 oral presentations, and 51 posters. Posters were discussed in 5 tables in a spatial café; each table selected the best poster.

Table 1 was on agriculture, biodiversity, groundwater pollution and hydrogeology. Facilitators: Annamaria

Castrignanò and Yafit Cohen. Best poster: "A data driven model for spatio-temporal estimation of shallow water table depth in soils", by Fabrizio Ungaro, Costanza Calzolari, CNR IRPI Firenze.

Table 2 was on air quality and disease mapping. Facilitators: Philip Dawid and Alessio Pollice. Best poster: "A spatio-temporal model for air quality mapping using uncertain covariates", by Michela Cameletti, Stefania Ghigo and Rosalba Ignaccolo, University of Bergamo, University of Torino.

Table 3 was on climatology, meteorology and sampling design. Facilitators: Werner Mueller and Alessandra Petrucci. Best poster: "Optimal spatial design for air quality measurement surveys: what criteria?" by Thomas Romary, Chantal de Fouquet, Laure Malherbe, Geostatistics team, Geosciences centre, Mines ParisTech, France and Institut National de l'Environnement Industriel et des Risques (INERIS), Direction des risques chroniques, France.

Table 4 was on ecology, conservation and natural resources management. Facilitators: Chantal de Fouquet and Giovanna Jona Lasinio. Best poster was "Spatial diversity in a 'zoom-lens': Analysing ecological communities through weighted spatial scales", Angelika Studeny, Calum Brown C., Janine Illian, Centre for Research into Ecological and Environmental Modelling University of St Andrews, United Kingdom.

Table 5 was on environmental risk assessment. Facilitators: Daniela Cocchi and Lelys Guenni. Best poster: "Spatial Dynamic Factor Models with environmental applications", by Pasquale Valentini, Luigi Ippoliti, Dani Gamerman, University G. d'Annunzio, Italy and Universidade Federal do Rio de Janeiro, Brasil.

A CD "Spatial Data Methods for Environmental and Ecological Processes - 2nd Edition. Proceedings". Editor B.Cafarelli, CDP Service Edizioni, ISBN: 978-88-96025-12-3 contains 110 vetted short papers and 6 abstracts. These proceedings can also be downloaded from:

http://dspace-unibg.cilea.it/handle/10446/994.

17th European Young Statisticians Meeting (EYSM) – Caparica, Lisbon, September 5-9, 2011.

Giovanna Jona Lasinio

The European Young Statisticians Meetings are conferences organized every two years under the auspices of the European Regional Committee of the Bernoulli Society. The aim is to provide a scientific forum for the next generation of European researchers in probability theory and statistics. It represents an excellent opportunity to promote new collaborations and international cooperation.

The Local Organizing Committee was chaired by Paulo Canas Rodrigues (Nova University of Lisbon, Portugal). This year's meeting saw the largest number of attendees and countries since the beginning of the EYSM: 45 young statisticians from 24 different European countries.

The 45 talks were organized in 14 sessions covering 14 different topics (with no parallel sessions): Time series and applications; Biostatistics; Statistical inference; Stochastic and empirical modelling; Stereology; Bayesian methods; Stable distributions; Regression; Hypothesis testing; Survival analysis; Extremes and risk; Applied statistics; Prediction; and Large sample approximations.

Four Keynote Speakers were invited: Wolfgang Polasek (Austria); Carlos Agra Coelho (Portugal); Maria Ivette Gomes (Portugal); and Kamil Feridun Turkman (Portugal).

Four social events allowed the participants to know each other and to have a taste of the Portuguese culture, weather, gastronomy, and hospitality.

The most notable social event was the conference excursion held on the Thursday afternoon. The program was called "Lisbon in pictures", and was a Lisbon Treasure Hunt to see and experience the best of Lisbon, organized in 6 teams. Each team was to follow a specially prepared route with a variety of checkpoints along the way, enjoying up to "10 Must See!" locations of Lisbon, and making use of all local forms of transport: tram, train and bus. Teams had to take pictures with digital or Polaroid cameras and answer questions about statistics, probability and Portugal.

It is expected that many of presented papers will be published, after refereeing, in a Special Issue of the journal Communications in Statistics—Theory and Methods, associated with this Conference.

The 18th Edition of the European Young Statisticians Meeting will take place in the city of Osijek, Croatia. The Local Organizing Committee will be chaired by Nenad Suvak (Department of Mathematics, J.J. Strossmayer University of Osijek).

4. Short Courses and Workshops

Quantitative Methods for Environmental Data Analysis with Statistical Package R – Hyderbad, India, January 1-2, 2012

The 2 day course will be taught by Prof. Marian E. Scott, Professor Adrian Bowman, University of Glasgow, UK and Dr. Richard E. Chandler, University College London, UK, leading experts with extensive background in teaching this type of course throughout Europe. This short course is being held as part of TIES 2012 in Hyderbad, India.

It is aimed in particular at researchers and workers in the environmental sciences who would like to extend their statistical skills, as well as to applied statistical workers who would like to extend their familiarity with the R environment. Attendance is especially encouraged from research students, early career teaching and research faculty, and those employed in public and private environmental organizations in India.

Along with a brief introduction to R (for those who have not used it before), the course will cover the following topics:

- Statistical basics, linear regression and R,
- Modern regression techniques: nonparametric regression, generalized linear and generalized additive models,
- Time series and trend analysis,
- Spatial data analysis, and
- Bayesian methods.

The focus will be on the practical application of the topics covered, with accessible summaries of the underlying theory so that delegates are able to apply the methods appropriately in their own work.

SAMSI Uncertainty Quantification: Observations Workshop, Asheville NC, USA, January 17-19, 2012 Observations are key to uncertainty quantification in climate research because they provide a corroborating source of information about physical processes being modeled. However, observations have uncertainties and this poses a set of methodological and practical issues for comparing them to model simulations.

The scientific themes of the workshop include: Experimental design aspects of collecting groundbased and remotely-sensed observations; Data fusion and homogenization: How to combine heterogeneous observational data sources to get a clearer picture of the true physical process; and Link to Uncertainty Quantification for projection of future climate based on past and present observations.

The workshop is co-sponsored by the Cooperative Institute for Climate and Satellites (CICS-NC) and by SAMSI. It is organized in cooperation with the Program in Spatial Statistics and Environmental Statistics (SSES) at the Ohio State University.

Details can be found at the following website: www.samsi.info/workshop/uq-observationsworkshop-january-17-19-2012

6. Recently or soon-to-be Published Books

"Elements of Ecology, 8th Edition by Thomas M. Smith and Robert Leo Smith (expected: Jan 2, 2012), publisher: Benjamin Cummings

"Statistics for Spatio-Temporal Data edited by Noel Cressie, Christopher K. Wikle (April 2011), Wiley

"Geostatistics: Modeling Spatial Uncertainty, 2nd Edition" by Jean-Paul Chilès and Pierre Delfiner (expected: February 2012), Wiley

"Advances and Challenges in Space-Time modelling of Natural Events" edited by Emilio Porcu, Jose Maria Montero and Martin Schlather (soft cover: expected Dec 30, 2011; hardcover expected: 2012), Springer

The Editor would like to encourage TIES members to volunteer book reviews and to bring new publications to their attention.

7. TIES Board of Directors

The elected members of the TIES Board of Directors are:

President: Don Stevens (president@environmetrics.org)

President-Elect: Bronwyn Harch (Bronwyn.Harch @csiro.au)

Secretary: Jorge Mateu (secretary@environmetrics.org)

Treasurer: Sylvia Esterby (treasurer@environmetrics.org)

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TIES Newsletter is a publication of The International Environmetrics Society (TIES). It is published semi-annually, or whenever the need arises by The International Environmetrics Society and distributed to TIES members as part of their annual dues. For questions regarding membership and other benefits, please contact Jorge Mateu at secretary@environmetrics.org.

Objectives of the Newsletter include:

• to keep TIES members informed of what is happening within the Society;

- to cover news in latest developments in theory and applications of environmetrics;
- to be a forum for discussion of a broad range of issues which are of interest to members of TIES and are consistent with the objectives of the Society;
- to facilitate communication between environmental scientists and statisticians about research problems of mutual interest;
- to provide details about upcoming conferences and workshops related to Environmetrics;
- to announce members' news that are worthy of notice or recognition (e.g., awards, prizes and honours received, promotions, appointments, etc.).

Communications, (e.g. contributions, comments and suggestions) regarding this publication should be addressed to the TIES Newsletter editor: Ayesha Ali (aali@uoguelph.ca). As Editor, I would like to encourage TIES members to submit items for publication in the Newsletter. I would like to thank the members who responded to my call and contributed to this issue.

Newsletter Board

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TIES Webpage: http://www.environmetrics.org/