



Newsletter

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Editors: Michael Dowd, Rosalba Ignaccolo and Alexandra Schmidt

In This Issue:

1. A Message from the President.
2. TIES News.
3. Environmetrics Conferences.
 - 3.1. Forthcoming TIES Conferences.
 - 3.2. Meeting Reports.
4. TIES Board of Directors.

1. A Message from the President,
Daniela Cocchi (daniela.cocchi@unibo.it)
Dipartimento di Scienze Statistiche
"Paolo Fortunati", Università di Bologna
Italy

Dear TIES members

The work of TIES members in 2009 has been very intense. We had many participants in our annual Conference TIES-GRASPA 2009 in Bologna on "Handling complexity and uncertainty in environmental studies" - almost

150 amongst the old and new members, 42 student members, together with a number of non TIES members, all contributing to the high scientific level of the Conference. I take the opportunity to thank both the Local Organizers of the Conference for having facilitated, by fostering a charming and friendly atmosphere, the scientific interaction among participants. I also wish to thank the Scientific Committee for their efforts in building up a remarkable program. Twenty-five papers have been recently submitted for the special issue of Environmetrics that followed the Conference.

I trust that the next 2010 Conference, organized in Margarita Island from 20 to 25 June by Lelys Guenni on "Sustaining our environment under changing conditions: quantitative methodological challenges" will be a success as well.

TIES has also entered the International Statistical Institute (ISI) family as a Section, and this has led to a number of initiatives. In order to synchronize better with the ISI the terms of our society's officers were altered: the Board of Directors and the Annual General Meeting decided to prolong the service of the present Board members for one year, until August 2011.

Our North-American representative Tillman Gneiting had to resign and has been replaced by Brian Gray since September 2009. At the TIES 2009 meeting all TIES Committees were renewed as follows: a) Program Committee: Don Stevens (chair), Sylvia Esterby, Francesca Bruno; b) Election Committee: Daniela Cocchi (Chair) Ian McNeill, Ray Correll; c) Publications Committee: Michael Dowd, (Chair) Alessandro Fassò, Sylvia Esterby, Abdel El-Shaarawi, Peter Guttorp, Don Stevens; d) Membership Committee: Don Stevens (chair), Ulla Holst, Tim Gregoire; e) Awards Committee: Reinhold Viertl (Chair) , Petra Kuhnart, Carlo Trivisano; f) Liaison and outreach committee: Daniela Cocchi, Don Stevens, Ron McRoberts, Ashley Steel, Hao Zhang.

The Editorial Board of our Newsletter has been reinforced and is now made up of: Michael Dowd (editor), Rosalba Ignaccolo and Alexandra Schmid (co-editors), together with Andrew Finley, Duncan Lee, Finn Lindgren, Melissa Dobbie and Laure Malherbe. The work of this enhanced board will permit to have at least two issues per year, and more articles in the newsletter.

At the end of October, myself and Secretary Alessandro Fassò met ISI President Jef Teugels and Director Ada Van Krimpen, together with their staff. We are working (helped by our Treasurer Sylvia Esterby) to facilitate the future of TIES as an ISI Section, while maintaining the history and unique aspects of our Society. One example is collection of membership fees: 2010 fees for members who renewed until 2009 will be collected via ISI, while TIES will renew contacts with people that interrupted payment after 2008.

Individual subscription to *Environmetrics* will be possible for 2010, according to the existing contract with Wiley. In addition, Wiley offers us a number of free tokens for downloading single articles of the journal: instructions for exploiting this opportunity will be given very soon.

In 2009, one regional activity has been TIES North American Regional Meeting, June 15-17, 2009, Corvallis, Oregon, USA, on *Measuring,*

TIES NEWSLETTER, VOL. 15, NO. 1, December 2009 *Monitoring, and Modeling Environmental Resources*; Regional activities for 2010 and 2011 are still under discussion.

At ISI 2009 in Durban, South Africa, TIES was included for the first time in the activities of Sections, and participated in discussions about ISI restructuring. The Sessions organized by TIES, with the General Topic Committee or with other Sections, attracted a large audience. TIES is involved in the organization of the next 2011 ISI Conference in Dublin: our delegates for the program are Bronwyn Harch (main delegate), Abdel El-Shaarawi, Peter Guttorp and Marian Scott. Abdel El-Shaarawi is organizing a full day on *Water, Quantity and Quality*, which is part of the Dublin program.

TIES was also invited to organize a Session at XI CLAPEM, Latin American Congress in Probability and Mathematical Statistics, November 1-6 2009. At present we are organizing Sessions in conferences promoted by other ISI Sections, namely IAOS and ISBIS, also involving other Societies, as the French Statistical Society. A TIES Satellite Meeting will occur in 2010 (METMA5), at Santiago de Compostela.

Environmental issues are on the forefront of public discourse these days, and the role of statistics ought to become even more important. All suggestions for promoting environmental statistics from TIES members are most welcome.

Daniela Cocchi

Bologna, December 2009

2. TIES News

Order of the British Empire Awarded to Professor Marian Scott

Professor Marian Scott, TIES member and associate editor of *Environmetrics*, was awarded an Order of the British Empire (OBE) for her services to Environmental Science.

Dr. Scott works in the Dept of Statistics at the University of Glasgow as a Professor of Environmental Statistics. She sits on a number of government committees including the Scottish Environmental Protection Agency's Particles Retrieval Advisory Group (Dounreay) and the Scottish Government's Natural Environment Statistics Advisory Committee (NESAC). She is a chartered statistician of the Royal Statistical Society (RSS), a Fellow of the Royal Society of Edinburgh and Fellow of the International Statistics Institute. She is associate editor of a number of scientific and statistical journals and books including *Journal of Environmental Radioactivity* and *Environmetrics*.

Congratulations from everyone at TIES to Marian on this impressive achievement.



Professor Marian Scott receiving the Order the British Empire from Queen Elizabeth II.

2008 and 2009 Abdel El-Shaarawi awards Young Researchers Awards.

After an interruption of 3 years, the Abdel El-Shaarawi Young Researcher's Award for excellence has been given out for both 2008 and 2009. The Award Committee was composed by Peter Guttorp (Chair), Armand Maul, Tony Olsen, and Marian Scott. The award winners are:

- 2008: Bronwyn Harch, CSIRO, Australia

Citation: For contributions to the construction of biological indexes for freshwater quality; for development of monitoring programs for water quality; for outstanding leadership and group building in CSIRO; for valuable contributions to TIES as conference organizer, treasurer, and board member.

- Alexandra Schmidt, Federal University of Rio de Janeiro, Brazil.

Citation: For contributions to spatio-temporal modeling of heterogeneous and non-separable processes; for contributions to multivariate spatial statistics; for organizing workshops and short courses both nationally and internationally.

These prizes were awarded at TIES 2008 in Kelowna, Canada.



Abdel El-Shaarawi (centre) with 2008 award recipients Bronwyn Harch (right) and Alexandra Schmidt (left)

- 2009 Sudipto Banerjee, University of Minnesota, USA

Citation: *For key research findings in hierarchical Bayesian modeling of spatially oriented data, with particular emphasis on applications in forestry and in environmental exposures and related health outcomes, for developing related computing methods, software, and textbook materials, and for editorial service to the profession.*



Daniela Cocchi (left) presenting the 2009 Abdel-El Shaarawi Award to Sudipto Banerjee (right)

New Members at TIES

Adelfio Giada,
 Albert-Green Alisha,
 Alqallaf Fatemah Ali,
 Andriani Eleonora,
 Angers Jean-François,
 Bacro Jean-Noel,
 Baffetta Federica,
 Bar-On Raphael R.,
 Bartoszczuk Pawel,
 Beaulieu Claudie,
 Bel Liliane,
 Berrocal Veronica,
 Bertaccini Pancrazio,
 Bishop Thomas F.A.,
 Blangiardo Marta,
 Bodnar Olha,
 Brambilla Carla,
 Buckland Stephen T.,
 BUESO MARIA C.,
 Calculli Crescenza,

camporese rina,
 Cannon Alex,
 Carena Andrea,
 Civardi Marisa,
 Cotroneo Rossana,
 Cox Lawrence H.,
 Crucifix Michel,
 Cuzol Anne,
 Dabo-Niang Sophie ,
 D'Ariano Cinzia,
 Datta Susmita,
 Davis Richard A.,
 Davison Anthony C.,
 de Vries W.F.M.,
 Di Leo Senatro,
 Di Salvo Francesca,
 Dolhanczuk-Srodka Agnieszka,
 Dominici Francesca,
 Dunson David B. ,
 Faust Christophe,
 Ferrari Clarissa,
 Finazzi Francesco,
 Finley Andrew,
 Franco Villoria Maria,
 Garreta Vincent,
 Geelan-Small Peter,
 Gelfand Alan E.,
 Ghigo Stefania,
 Glèlè Kakai Romain Lucas,
 Golini Natalia,
 Gronz Oliver,
 Gupta Vinod K.,
 Gwladys Toulemonde,
 Haggarty Ruth,
 Haug Ola,
 Holland Kyle,
 Hopke Philip Karl,
 Horvathova Eva,
 Kardaun Otto J.W.F.,
 Kavalieris Laimonis,
 Khan Shahjahan,
 Knol Anne,
 Komprda Jiri,
 Kovarova Milena,
 Kozlowska Maria ,
 Larsen Bo,
 Lebreton Jean-Dominique,
 Lee Jonathan,
 Lee Mei-Ling T,
 Lega Massimiliano,
 Lu Qiqi,
 Lynch Miranda,
 Mannshardt-Shamseldin Elizabeth,
 Mantovan Pietro,

Maruotti Antonello,
 Mateu Jorge,
 McNaughton Beverly,
 Menezes Raquel,
 Mercuriali Mattia,
 Monbet Valérie,
 Morgan Byron J.T.,
 Muggeo Vito M.R.,
 Musenge Eustasius,
 Myllymäki Mari,
 Nicolas Verzelen,
 Nunes Maria Helena Mouriño Silva,
 Nychka Douglas W. ,
 Onorati Rossella,
 Ottavi Alessandro,
 Pantani Ottorino-Luca,
 Parnell Andrew,
 Pasanen Leena,
 Pelliccioni Armando,
 Petkau A. John,
 Petrone Sonia,
 Picone Marco,
 Pierre Ailliot,
 Pietrogrande Chiara,
 Pilz Jürgen,
 Plaia Antonella,
 Poggi Jean-Michel,
 Portier Christopher J.,
 Powell Helen,
 Radermacher Walter,
 Ramos Ábalos Eva M^a ,
 Reid Nancy,
 Ribatet Mathieu,
 Ribereau Pierre,
 Rico Castro Nuria,
 Roberts Steven,
 Rodriguez Marco A.,
 Rotondi Renata,
 Routledge Rick,
 Sain Stephan,
 Salter-Townshend Michael,
 Sanderson Jean,
 Sanso Bruno,
 Sarra Annalina ,
 Sauleau Erik A.,
 Schmidt Alexandra,
 Schoenberg Frederic P.,
 Shabaneh Luay A.F.,
 Simchera Vassily,
 Sinha Arun Kumar,
 Smith Bruce R.,
 Sobiech-Matura Katarzyna,
 Sookun Anand,
 Sweeney James,

Szpiro Adam,
 Tamura Hirokuni,
 Tonellato Stefano F.,
 Vaghegini Alessandro,
 Varini Elisa,
 Ventrucchi Massimo,
 Vrousai Rountina,
 Wan Victoria,
 Wigton William H.,
 Williams Kenneth,
 Wu Margaret A.,
 Xu Ronghui,
 Yerel Suheyla,
 Yip Stan C Y,
 Zhang Chongqi,
 Zhang Yuxin,
 Zhu Rong,

Forthcoming papers in Environmetrics

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

www3.interscience.wiley.com/journal/93013115/issue

3. Environmetrics Conferences

3.1. Forthcoming TIES Conference

TIES 2010 - the 21st Annual Conference of The International Environmetrics Society, Margarita Island, Venezuela, June 20-25, 2010

The next Annual Conference of The International Environmetrics Society will be held in Margarita Island, Venezuela from the 20th until the 25th of June, 2010. The main conference theme is: Sustaining our environment under changing conditions: quantitative methodological challenges.

The program includes courses, plenary talks, invited sessions, as well as general poster and contributed sessions. Plenary Talks include the President's Invited Lecture that will be given by Prof. Bruno Sansó from the University of California in Santa Cruz.

Scientific Committee

José Miguel Angulo, Spain
 Daniela Cocchi, Italy
 Ray Correll, Australia
 David Brillinger, USA
 Abdel El-Shaarawi, Canada
 Sylvia Esterby, Canada
 Alessandro Fassó, Italy
 Lelys Guenni, Venezuela (Conference Chair)
 Peter Guttorp, USA
 Bronwyn Harch, Australia
 Luis Raúl Pericchi, Puerto Rico
 Alexandra Schmidt, Brazil
 Marian Scott, UK

Local Organizing Committee

Rafael Borges, Universidad de los Andes
 Aracelis Hernandez, Universidad de Carabobo
 Saba Infante, Universidad de Carabobo
 Isabel Llatas, Universidad Simón Bolívar
 José Rafael León, Universidad Central de Venezuela
 Carin Ludeña, Instituto Venezolano de Investigaciones Científicas
 Neyra Peña, Universidad Simón Bolívar
 Pedro Sequera, Universidad Simón Bolívar
 Desireé Villalta, Universidad Simón Bolívar

Invited Sessions include topics in:

- Air quality monitoring and assessment
- Indicators of environmental change
- Environmental data quality assessments
- Monitoring and modeling of environmental systems
- Environmental sustainability assessments
- Environmental standards
- Environmental vulnerability and risk assessments
- Space-time modeling of environmental data
- Spatio-Temporal analysis of human health
- Spatio-Temporal modeling of extremes
- Statistics in Paleoclimate
- Outreach in environmental statistics
- Valuation of ecosystem services
- Water quality monitoring and assessment



Margarita Island, Venezuela

Important Dates

November 20, 2009: Registration and submission of abstracts opens

March 05, 2010: Early registration deadline

March 19, 2010: Deadline for submission of abstracts to appear in the Conference Book of Abstracts

For more information check the Web Page

<http://ties2010.cesma.usb.ve>

Or write an e-mail to: ties2010@cesma.usb.ve

3.2 Meeting Reports

TIES 2009 - the 20th Annual Conference of The International Environmetrics Society and GRASPA Conference. Bologna, Italy, July 5-9, 2009

The 20th Annual Conference of The International Environmetrics Society was held at the Department of Statistics, University of Bologna, Italy, jointly with the GRASPA Conference 2009, under the common heading of “Handling complexity and uncertainty in environmental studies”.

GRASPA (www.graspa.org) is the Italian Research Group for Statistical Applications to Environmental Problems, and the GRASPA conference was the final meeting of two Italian Projects (PRIN-MIUR-2006) on environmental statistics: “Statistical analysis and modeling of impact and risk for environmental phenomena in

space and time” and “Methods for collecting and analyzing environmental data”.

The conference had a very rich scientific program, with 4 plenary sessions, 26 invited sessions, 23 contributed sessions and 2 poster sessions, where 233 participants from 26 countries were involved (among them, 59 participants came from outside Europe). Participants had the opportunity to exchange opinions not only at the sessions, but also more informally at the on-site lunches as well as at the welcome reception, at the banquet and at the mid conference tours.

On July 4th, Sunday, 50 participants attended the short course on “Hierarchical Modeling and Analysis of Spatial-Temporal Data: Emphasis in Forestry, Ecology, and Environmental Sciences” given by Andrew O. Finley (Department of Forestry and Geography, Michigan State University) and Sudipto Banerjee (Division of Biostatistics, School of Public Health, University of Minnesota).

The conference was opened by the President’s Invited Lecture delivered by Walter Radermacher (Chief Statistician of the European Union and Director-General of Eurostat) on “Sustainable Economics: the contribution of official statistics”. For the J. Stuart Hunter Lecture, established in 1996, Doug Nychka (National Center for Atmospheric Research) was designated for a talk about “Spatial statistics, computer models and regional climate change” (the talk was presented by Steve Sain, also of NCAR, due to an unpredictable last minute difficulty). Giovanna Jona Lasinio (University of Roma “La Sapienza”) and Lorenzo Fattorini (University of Siena) gave the two GRASPA Invited Lectures on “Spatio temporal data modeling in environmental sciences: a review” and “Sampling strategies for the assessment of ecological diversity” respectively.

Modeling complex (count or spatial and temporal) environmental data was a central issue in several sessions, with a particular focus on computational aspects. Other methodological papers covered risk analysis, extreme values, point processes, change-point methods,

nonparametric statistics, functional data and wavelet-based analysis, as well as chemometrics. Application areas were in air quality, water resources, forest fire and weather, ocean climatology, hydrology, palaeoclimatology, as well as environmental health and epidemiology.

The annual general meeting was held on Wednesday 7th, followed by the conference dinner held at the Complex of San Giovanni in Monte. During the dinner the traditional TIES award to the best poster and Abdel El-Shaarawi Young Researcher Award were conferred. Also a GRASPA Best Poster Award was presented, as well as other “serious but fun” awards to several participants.

The Social program included a welcome reception on Sunday evening, at the Department of Statistics, and a tour on Tuesday afternoon. Participants could choose between (i) hiking in the *Parco dei Gessi Bolognesi*, characterized by a series of gypsum outcrops and very interesting karst system, and (ii) the tasting of wine at the *Enoteca Regionale Emilia Romagna*, after visiting Dozza, a small medieval hilly village decorated with frescoes made by renowned artists and surrounded by vineyards.

Some sessions’ slides as well as conference pictures are downloadable at www2.stat.unibo.it/ties2009.



Some members of the local organizing committee for TIES 2009

TIES 2009 Best Student Paper Competition

The Best Student Paper Committee was composed of Francesca Bruno (Chair), Bronwyn Harch, Armand Maul, Marian Scott and Don Stevens. The prize was awarded to Maria Franco Villoria of the University of Glasgow for the paper:

“Extreme Events and business continuity planning - exploration in flood risk strategies within Scotland” (Co-authors: Marian Scott, Trevor Hoey, Denis Smith, Alistair Cargill).

A honourable mention was awarded to Ruth Haggerty of the University of Glasgow for the paper:

“Extreme Value Theory Applied to the Definition of Bathing Water Discounting Limits” (Co-authors: Marian Scott, Claire Ferguson).

TIES 2009 Best Poster Award

The TIES Best Poster Committee was composed of Peter Guttorp (Chair), Sudipto Banerjee, Anders Grimvall, Lelys Guenni, Jorge Mateu, Paul D. Sampson and Kristina Voigt.

The prize was awarded to Claire Ferguson of the University of Glasgow for the poster:

“Monitoring and Managing Cyanobacterial Risks in Freshwater Lakes” (Co-authors: Marian Scott, Laurence Carvalho, Geoffrey A. Codd, Andrew Tyler)

GRASPA 2009 Best Poster Award

The GRASPA Best Poster Committee was composed of Fedele Greco (Chair), Lucio Barabesi, Michela Cameletti, Rosaria Ignaccolo, Giovanna Jona Lasinio, Vito Muggeo, and Stefano Tonellato.

The prize was awarded to Petra Kuhnert of the Australia's Commonwealth Scientific and Industrial Research Organisation for the poster:

“Estimating abundance of pelagic fishes using gillnet catch data in data-limited fisheries: a Bayesian approach” (Co-authors: Shane Griffiths, William Venables, Stephen Blaber)

This TIES 2009 Meeting report was prepared by Rosalba Ignaccolo.

European Regional Meeting of the International Society for Business and Industrial Statistics 2009. May 30-June 3 2009.

The 2009 European Regional Meeting of the International Society for Business and Industrial Statistics (EURISBIS'09) was held in Cagliari and Santa Margherita di Pula, Italy, from May 30th to June 3rd 2009. The Scientific Program Committee was chaired by Vincenzo Esposito Vinzi (ESSEC Business School of Paris and Singapore; ISBIS Vice-President), Nick Fisher (Valuometrics; ISBIS President) and Francesco Mola (University of Cagliari).

The scientific program comprised two Keynote Lectures, a Plenary Session, 21 Invited Sessions and 15 Contributed Sessions, in which approximately 110 people arriving from 18 different countries acted as speakers. Both Invited and Contributed Sessions focused mainly on statistical issues aimed at improving decision-making processes in Banking and Finance, Environment, Quality of Services for Small and Medium Enterprises (SMEs), Transport and Tourism.

Several TIES members were involved both in the organisation and in the scientific activities.

TIES President, Daniela Cocchi, acted as member of the Scientific Committee. Alessandro Fassò, TIES Secretary, held a keynote lecture entitled “Integrating satellite and ground level data for air quality monitoring and dynamical mapping” (Co-authors: F. Finazzi, C D’Ariano), TIES past president Anders Grimvall presented the talk “Simplicity as the ultimate sophistication in environmental management” in the session “Statistical analysis for decision support”. An invited session was scheduled on “Statistics for health and environment”, organised by Daniela Cocchi with talks of TIES members Annibale Biggeri, Fedele Greco and Rossella Miglio.

The next ISBIS meeting, ISBIS-2010 - Biennial International Conference of ISBIS: Portoroz,

TIES NEWSLETTER, VOL. 15, NO. 1, December 2009
Slovenia, will take place on July 6-9, 2010
(<http://www.action-m.com/isbis2010/>). Some
sessions in the Conference will be organized by
TIES.

4. TIES Board of Directors

The following are the names of the elected
members of TIES Board of Directors. All terms
run to August 31, 2011, except the 4-year terms
of the regional directors.

President: Daniela Cocchi
(president@environmetrics.org)

President-Elect: Don Stevens
(stevens@science.oregonstate.edu)

Secretary: Alessandro Fassò
(secretary@environmetrics.org)

Treasurer: Sylvia Esterby
(treasurer@environmetrics.org)

Publications Officer: Mike Dowd
(mdowd@mathstat.dal.ca)

Regional Representatives:

North America:

Montserrat Fuentes (fuentes@stat.ncsu.edu)

Brian Gray

Europe:

Ivana Horova (horova@math.muni.cz)

Marian Scott (marian@stats.gla.ac.uk)

Other Regions:

Lelys Bravo de Guenni
(lbravo@cesma.ub.ve)

Bronwyn D. Harch
(Bronwyn.Harch@csiro.au)

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. Contact Alessandro Fassò at
secretary@environmetrics.org for questions
regarding membership and other benefits.

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: Michael
Dowd (mdowd@mathstat.dal.ca). The Editors would
like to encourage TIES members to submit items for
publication in the Newsletter. We would like to thank
the members who responded to our call and
contributed to this issue.

<p style="text-align: center;">TIES Webpage: http://www.environmetrics.org/</p>
