# **FIRST ANNOUNCEMENT AND CALL FOR PAPERS**

# FOURTH INTERNATIONAL SYMPOSIUM ON GIS/SPATIAL ANALYSES IN FISHERY AND AQUATIC SCIENCES



Universidade Santa Úrsula Rio de Janeiro, Brazil August 25(Mon)-29(Fri), 2008





Deadline for the registration and submission of abstract is June 15, 2008

Please distribute this announcement to your colleagues or friends who might be interested in participating in this Symposium.

# **DEAR COLLEAGUES,**

We are pleased to announce the 'Fourth International Symposium on GIS/ Spatial Analyses in Fishery and Aquatic Sciences'. Its general theme is the same as in the past three Symposia, i.e., to emphasize GIS as a tool for conducting spatial analyses in aquatic sciences, which encompasses the ecosystem approach to fisheries management and the interrelationships between inland and marine fisheries and aquaculture, and the aquatic and terrestrial environments in which the activities take place.

# [BACKGROUND]

Applications of spatial analyses using GIS in fishery and aquatic sciences have lagged behind those used in terrestrial sciences. However, from the last decade of the 20<sup>th</sup> century to the present, GIS has rapidly become a powerful tool for spatial analyses in aquatic environments, as evidenced by the papers presented in the past three Symposia. There have also been local, regional and national GIS workshops and meetings on various topics in fishery and aquatic sciences including: fisheries oceanography, aquaculture, satellite remote sensing, inland fisheries, fisheries management, spatial numerical analyses, etc. However, the opportunity to share experiences in these developments and applications at a global level has been limited.

For this reason, the inaugural 'First International Symposium on GIS in Fishery Science' was held in Seattle, Washington, USA in 1999. It was coorganized by the National Marine Fisheries Service (NMFS) and the 'Fishery GIS Research Group (Saitama, Japan)' (\*) and was quite successful, with 230 presentations (131 orals, 89 posters and 10 GIS software demonstrations).

(\*) Its name has been changed to 'Fishery-Aquatic GIS Research Group' in 2002 to cover subjects also in the aquatic sciences.

The Second Symposium was held at the University of Sussex in Brighton, England, U.K. in 2002, and was co-organized by the Fishery-Aquatic GIS Research Group and Dr Geoff Meaden (keynote speaker of the First Symposium), from the Fisheries GIS Unit, Department of Geography, Canterbury Christ Church University, Canterbury, UK. It was also successful, with 96 presentations (67 orals, 23 posters and 6 GIS system related demonstrations).

The Third Symposium took place in Asia at the Shanghai Fisheries University in China in 2005 and it was co-organized by the Fishery-Aquatic GIS Research Group and Professor/Dean LiuXiong Xu, Department of Marine Fisheries Sciences and Technologies, Shanghai Fisheries University. It was fruitful with many Asian participants and with 70 presentations (47 orals, 15 posters and 8 GIS system related demonstrations).



Group photo (Second Symposium at the University of Sussex in Brighton, England, U.K. in 2002)



Group photo (Third Symposium at the Shanghai Fisheries University, China in 2005)

These three global fishery and aquatic GIS conferences have generated interest world-wide and there has subsequently been strong interest in demonstrating new and further developments. In the three years since the Third Symposium, it is apparent that there has been significant progress in GIS/spatial analyses in fishery and aquatic sciences. Hence, we encourage your participation in the Fourth Symposium to present new ideas or to share updates on your spatial research using GIS or on other GIS-related issues such as software development, computer hardware, education and reviews.

This is the 'FIRST ANNOUNCEMENT AND CALL FOR PAPERS' for the 'Fourth International Symposium on GIS/Spatial Analyses in Fishery and Aquatic Sciences'. The 'Fishery-Aquatic GIS Research Group' will again be the main organizer and the venue of the Fourth Symposium will be in Rio de Janeiro, Brazil with the local co-organizer, Dr Philip Conrad Scott, Instituto de Ciências Biológicas e Ambientais (Institute of Biological and Environmental Sciences), Universidade Santa Úrsula.

# [OBJECTIVES]

The primary objectives of the Fourth Symposium are the same as in the past i.e.,

- To highlight developments and applications of GIS/Spatial analyses in Fishery and Aquatic Sciences;
- To exchange ideas and information; and
- To suggest further improvements, techniques and applications of GIS/Spatial analyses in Fishery and Aquatic Sciences.

# [THEMES]

At each Symposium, there has been a single theme in order to highlight and strengthen that area of fishery GIS (see Table 1, next page). "GIS software" was the major theme of the First Symposium in 1999. GIS was becoming an essential tool for spatial analysis of fisheries data and various GIS software programs were either being developed or adapted for these analyses. The First Symposium provided a forum to showcase these GIS software applications.

Following the First Symposium, we observed the development of basic quantitative spatial analyses using GIS; however, quantitative GIS applications and linkages to stock assessment, resources management, population estimation, geostatistics, forecasting, contour estimation, etc., were not well established or developed. Thus, the theme at the Second Symposium in 2002 was "Spatial Numerical Analyses".

Three themes were established for the Third Symposium in 2005. The first was "Effective and Affordable GIS for Fishery and Aquatic Information,"

especially for the developing countries. Our intention was to encourage participation by people from developing countries and to demonstrate how GIS could be used by those in these countries.

The second theme was "Spatial Fish Stock Assessment Modeling." At the First Symposium there were several papers on GIS (space) based production models and VPAs under development, which were exciting topics. Indeed there have been many geostatistics-related papers in the past Symposia.

The third theme was "Spatial Fisheries Resource Management." Fisheries managers, not only in the developed countries but also in the developing countries, are gradually adopting GIS-based systems, along with GPS, VMS, satellites, electronic log books, etc., and integrating these into their organizations to manage fisheries resources. As a result this topic was extremely useful for government officials, engineers, GIS system developers, and scientists to help them learn about and exchange information on recent developments and technologies.

Regarding themes in the Fourth Symposium we are now looking for the opinions from the e-mail list members. If you have ideas, please inform the Secretariat of the Fishery-Aquatic GIS Group by e-mail at aco20320@par.odn.ne.jp.

Table 1. Themes in 1<sup>st</sup>-4<sup>th</sup> Symposium.

Symposium	Themes		
First Symposium (1999)	GIS Software		
Second Symposium (2002)	Spatial Numerical Analyses		
Third Symposium (2005)	Effective and Affordable GIS for Fishery and Aquatic Information (especially for the people in the developing countries) Spatial Fish Stock Assessment Modeling Spatial Fisheries Resource Management		
Fourth Symposium (2008)	We are looking for the opinions from the e-mail list members. If you have ideas, please inform the Secretariat of the Fishery-Aquatic GIS Group by e-mail at aco20320@par.odn.ne.jp.		

# [PARTICIPATION]

Participation from a broad audience representing GIS/Spatial analyses in Fishery and Aquatic Sciences is encouraged, i.e., scientists, students, computer experts (developers or engineers), managers (government officials), administrators, educators and others.

# [PRESENTATION OF PAPERS]

For participants who wish to present their work, there are three ways, i.e., by oral presentation, poster presentation or PC based demonstration of GIS software, hardware and related systems. Duration of oral presentations will depend on number of presenters, but we tentatively set them for 20 minutes (15 minutes for presentation and 5 minutes for questions and answers). For poster presentations and PC demonstrations, particular sessions will be set up. The final duration of oral presentations and details of poster and PC demonstrations will be determined and informed later.









# [LANGUAGE]

We use only English for communications, presentations, abstracts, full papers and all the other relevant matters on the Symposium. For presenters, please speak slowly and clearly as more than 50% of the participants were non-native English speakers in the past.

# [SUBJECTS]

The Symposium will cover spatial analyses using GIS or GIS related topics in Fishery and Aquatic Sciences. Within this there are three main categories:

- [A] Marine related subjects;
- [B] Freshwater, Inland or Brackish-water related subjects; and
- [C] Other subjects.

Each of these three main categories may include a variety of sub-topics as follows:

# [A] MARINE RELATED SUBJECTS

- (1) Habitats
- (2) Fisheries
- (3) Fishery Oceanography, Marine Ecosystems or Ecology
- (4) Remote Sensing and/or Acoustic Survey
- (5) Marine Resources Analysis and Management
- (6) Geostatistics, Forecasting and Modelling
- (7) Mariculture
- (8) Artificial Reefs and Marine Protected Areas (MPA's)
- (9) Others (specify for registration)

# [B] FRESHWATER, INLAND OR BLACKISH-WATER RELATED SUBJECTS (INCLUDING WATERSHED AND ESTUARY)

- (1) Habitats
- (2) Fisheries
- (3) Estuarine, Lacustrine and Riverine Ecosystems or Ecology
- (4) Remote Sensing and Aquatic Surveys
- (5) Resources Analysis and Management
- (6) Forecasting, Geostatistics or Modelling
- (7) Aquaculture
- (8) Others (specify for registration)

# [C] OTHERS

- (1) Theory, Concepts or General Topics
- (2) Demonstration of GIS related Software, Database, Hardware or Systems using Computers
- (3) Education
- (4) Reviews
- (5) Others (specify for registration)

# [ABSTRACTS]

All presenters MUST submit an abstract by June 15, 2008. Abstracts submitted after this date will not be accepted due to the strict time constraint for producing the Symposium Program and the Abstract Proceedings. The Guidelines for submission of the abstract are stated in Box 1 (below). An Abstract Proceedings will be prepared and one copy will be provided for each participant at the registration desk in the Symposium. If you are interested in obtaining the Abstract Proceedings from the last three Symposia, please refer to the web site at <a href="http://www.esl.co.jp/Sympo/index.htm">http://www.esl.co.jp/Sympo/index.htm</a>.

# BOX 1 Guideline for Abstract Submission

# (1) Format

Each abstract will be printed on a sheet of standard A4 paper. The abstract should not exceed 350 words. In the abstract, please include objectives, methods (including the GIS software name if applicable) and results. One color GIS Map or Figure can be also submitted (optional). The example of the abstract format is specified as follows:

# (Format of the Abstract)

(Title) Guidelines for the Symposium on GIS in Fishery Sciences (Authors) Yoko ONO <sup>1/</sup> and John LENNON <sup>2/</sup>

- 1/ Professor, GIS Research Institute, Univ. of Hot Springs, Kyoto, 424-0091, Japan (yoko@ono.edu.jp)
- 2/ GIS expert, Instituto de Ciências Biológicas e Ambientais, Universidade Santa Úrsula, Rua Jornalista Orlando Dantas 59, Botafogo, 22231-010 Rio de Janeiro – RJ Brazil (john@lennon.br)

(Key words) List by the alphabetical order, Maximum 8 key words

### (Text) Not more than 350 words

# (2) Submission

Abstracts should be submitted by E-mail to the Secretariat of the Fishery-Aquatic GIS Research Group at <a href="mailto:aco20320@par.odn.ne.jp">aco20320@par.odn.ne.jp</a> by June 15, 2008. The file format can be MS-WORD, WordPerfect or plain ASCII text.

# [AWARDS FOR BEST PRESENTATIONS]

We plan to give awards to the best presentations (orals and posters). Details will be determined later.

# [KEYNOTE SPEAKERS AND MODERATORS]

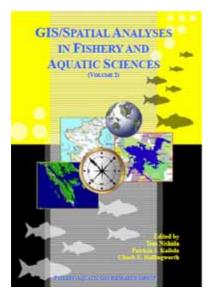
Keynote speakers and moderators for each session will be determined and informed later.

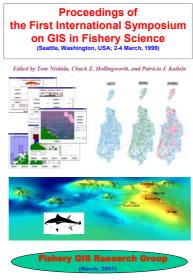
# [SYMPOSIUM PROCEEDINGS]

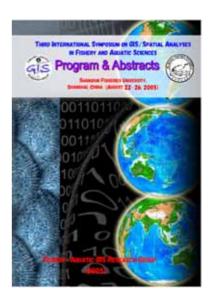
Those who make a presentation (oral, poster or PC demonstration) and who wish to submit a full paper for the Symposium Proceedings, to be published by the Fishery-Aquatic GIS Research Group as "GIS/SPATIAL ANALYSES IN FISHERY AND AQUATIC SCIENCES (VOLUME 4)", should send a full paper to the Secretariat of the Fishery-Aquatic GIS Research Group at aco20320@par.odn.ne.jp by September 30, 2008.

Papers will be peer reviewed by two referees. If the paper is then accepted, it will be checked by professional editors before formal publication. The Proceedings will be published in 2009. **Revised "Guidelines" for the full papers are available at** http://www.esl.co.jp/Sympo/4th/New%20guidelines.pdf.

If you are interested in the Proceedings of the past Symposia and other publication, please refer to the web site at <a href="http://www.esl.co.jp/Sympo/index.htm">http://www.esl.co.jp/Sympo/index.htm</a>.







# [OUTLINE OF THE SCHEDULE](\*)

Table 2. Outline of the fourth symposium schedule.

August, 2008	Events and Activities	Social events	Registration
25(Mon)	<ul> <li>Openings and key note speech</li> <li>Oral presentations         (GIS system, concept and education)     </li> </ul>	traditional ice-breaking party	
26(Tue)	Presentations	Group Photo	Registration
27(Wed) 28(Thu)	(Major topics will be covered by Orals, Posters and demonstrations of GIS software, system with PCs)	Symposium dinner	period
. ,	• Award caramany for the best presentations		
29(Fri) (morning)	◆Award ceremony for the best presentations     ◆Sum-up Session (Panel discussion)     ◆Closings		

(\*) Those who don't have time to stay for 5 days, it is suggested to attend for first 3-4 days from Aug. 25/26-28 as major research papers will be presented in these 3-4 days.









# [REGISTRATION]

If you wish to participate in the Fourth Symposium, send the following information by E-mail to the Secretariat of the Fishery-Aquatic GIS Research Group at <a href="mailto:aco20320@par.odn.ne.jp">aco20320@par.odn.ne.jp</a>. <a href="mailto:Please make one registration per one person attending">Please make one registration per one person attending</a>.

- (a) Full name (first, middle and last: last name in capital letters);
- (b) Name of the organization that you belong to;
- (c) Your Post, and Position or Title;
- (d) Postal (mailing) address;
- (e) E-mail address;
- (f) Telephone number including country code;
- (g) FAX number including country code; and
- (h) If you want to stay at the Guest House on campus during the Symposium, please indicate 'Guest House information needed' (for details, refer to 'ACCOMMODATION' Section);

If you intend to present a paper (including poster, exhibition and demonstration using PC or other devices), please also inform us of the following additional information. (If you are making more than one presentation, please provide information on each separately).

- (i) (Tentative) title of your paper (with names of co-authors, if any);
- (j) Subject of the paper: Select one from category specified in [SUBJECTS] above, for example, [B]-(3);
- (k) Name of the presenter; and
- (I) Preferred method of presentation (oral, poster, or software/hardware demonstration with PC).

After you send the registration form by e-mail, <u>you will get the registration</u> <u>number</u> from the Secretariat. If you don't get the number in one week, please re-send the same information by e-mail.

# [REGISTRATION FEES<sup>(\*)</sup>]

After you get your registration number, please pay the registration. When you send the registration fee, please indicate your registration number. Table 3 shows the summary of the registration fees.

Table 3 Summary of registration fees

Туре	Payment Period	registration fees (**)	Payment Method (See below for details)
Normal registration fee	before June 15, 2008	US \$ 200	Checks or Credit cards
Late registration fee	After June 16, 2008	US \$ 400	
On-site (walk-in) registration fee	Aug. 25-29, 2008 (during the Symposium)		Checks, credit cards or cash

[Note] (\*) Registration fees will be used for administrative expenses, costs of the facilities, the wages of the part time assistants, printing costs for the abstract proceedings, the Symposium Proceedings and other related & necessary expenses.

### **Methods of Payment**

### (Method A) Checks

Make a check payable (in US \$) to: 'Fish-GIS" and send it by air mail to:

Fishery-Aquatic GIS Research Group c/o Environment Simulation Laboratory, 2F, Noble Building 2-4-1, Arajuku-Cho, Kawagoe-city, Saitama-ken, Japan 350-1124

# (Method B) Credit cards

Visa, Master Card, American Express or JCB are accepted. Please inform us of your credit card name, its number and expiry date (year/month). For security reasons, please send these information by splitting it into a few separate e-mails to (aco20320@par.odn.ne.jp) or by FAX 81 (Japan)-49-241-2442 (international) or 049-241-2442 (in Japan) to the Secretariat of the Fishery-Aquatic GIS Research Group.

### Important notes:

- (1) For those who have informed of us their CR information in the past, you don't need to send again except if you have new information such as new expiry date and/or a new CR number, etc.
- (2) As Agencies of these credit card companies are based in Japan, they will use Japanese currency for the settlements. This means that you might pay less or vice versa depending upon the exchange rates between two dates, i.e., the date when the credit card agencies pay (settle) with the Fishery-Aquatic GIS Research Group and the later date when these agencies charge (settle) with the payee (you)

# [CANCELLATION POLICY]

If you wish to cancel your attendance after completing the registration, then you should inform the Secretariat by E-mail. If informed, 50% of the registration fee will be returned.

# [VENUE (MEETING ROOMS)]

To be informed in the 2<sup>nd</sup> Announcement to be distributed by March 2008.

# [ACCOMMODATION]

To be informed in the 2<sup>nd</sup> Announcement to be distributed by March 2008.

# [EXCURSIONS]

No excursions are planned. However, it is easily possible for visitors to book onto excursions through local travel agencies.









# [SCHEDULE (IMPORTANT DEADLINES AND DATES)]

Dates	Contents
June 15, 2008	Deadline for the normal registration Deadline for the abstract submission  Those who will present papers (including oral, posters and PC demonstration) MUST register and send the registration fee & ABSTRACT by JUNE 15, 2008, otherwise, presentations will not be accepted.
June 16 -Aug. 29, 2008	Period of late or on-site (walk-in) registration
Aug. 25-29, 2008	4th Symposium
September 30, 2008	Deadline for the full papers for the Proceedings (GIS/Spatial analyses in Fishery and Aquatic Sciences) (Volume 4)
2009	Publication of the Proceedings (GIS/Spatial analyses in Fishery and Aquatic Sciences) (Volume 4)

# [HELP FOR ADVERTISEMENTS]

Please help to put this announcement in free listings, e.g. 'Fishing International', 'various GIS publications', etc. and/or to put it in the bulletin boards in research institutions, universities and other relevant outlets. Please also help to distribute this announcement to your colleagues or friends who might be interested in participating in this Symposium. We very much appreciate your kind help and cooperation in this.

# [CALL FOR ADVERTISEMENTS]

If GIS related firms such as software and hardware developers are interested in putting their advertisements in our publications and E-mail circulations please contact the Secretariat of the Fishery-Aquatic GIS Research Group by E-mail at <a href="mailto:aco20320@par.odn.ne.jp">aco20320@par.odn.ne.jp</a>. We will consult details including the design, the cost etc. Please note we have more than 7,000 E-mail members in nearly 50 countries and 10 international organizations.

# [ORGANIZER AND CONVENER]

## Fishery-Aquatic GIS Research Group

(http://www.esl.co.jp/Sympo/outline.htm)

**Dr Kiyoshi Itoh** (Representative) and **Dr Tom Nishida** (Convener)

C/o Environmental Simulation Laboratory (http://www.esl.co.jp/)

2F, Noble Building, 2-4-1 Arajuku-Cho, Kawagoe, Saitama, Japan 350-1124

E-mail: aco20320@par.odn.ne.jp

Phone : 81(Japan)-(0 for domestic)-492-42-9262 FAX : 81(Japan)-(0 for domestic)-492-41-2442

# [LOCAL CO-ORGANIZER]

### **Dr Philip Conrad Scott**

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(Institute of Biological and Environmental Sciences)

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22231-010 Rio de Janeiro - RJ, Brazil

E-mail : philip@laquasig.bio.br

Phone : 55(Brazil)-(0 for domestic)-21 2553-4310 FAX : 55(Brazil)-(0 for domestic)- 21 2551-6446

# [SUPPORTING ORGANIZATION]

### **American Fisheries Society Computer User Section**

AFSCUS (http://www.fishdata.org/)

### **Bill Fisher (President-Elect)**

Oklahoma Cooperative Fish and Wildlife Research Unit and

Department of Zoology,

Oklahoma State University, Stillwater, Oklahoma 74078 U.S.A.

E-mail : wfisher@okstate.edu
Phone : 1(USA)-405-744-6342
Fax : 1(USA)-405-744-5006

Homepage : http://zoology.okstate.edu/zoo\_fclt/fisher.htm

### The World Fish Center (http://www.cgiar.org/iclarm/)

Dr Stephen J. Hall (Director General)

P.O. Box 500, GPO 10670 Penang, Malaysia

E-mail: worldfishcenter@cgiar.org

Phone: 60(Malaysia)-(0 for domestic)-4-626-1606 Fax: 60(Malaysia)-(0 for domestic)-4-626-5530

Roles of the supporting organizations are to promote the Symposium by putting the Symposium information on their newsletters, journals and periodical publications.

# [SUPPORTING MEMBERS] (ALPHABETICAL ORDER OF THE LAST NAMES)

### Dr Din Chen

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E-mail : Din.Chen@sdstate.edu : 1(USA)-605-688-6212 Phone : 1(̀USA)́- 801-469-7848 Fax

Homepage : http://teach.sdstate.edu/users/chend/

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Homepage : http://zoology.okstate.edu/zoo\_fclt/fisher.htm

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F-mail

: a.gimona@macaulay.ac.uk : 44(UK)-(0 for domestic)-1224-876544 Phone : 44(UK)-(0 for domestic)-1224-295511 Fax

### Dr James McDaid Kapetsky (ex-FAO GIS expert)

C-FAST, Inc.

(Consultants in Fisheries and Aquaculture Sciences and Technologies),

5410 Marina Club Drive, Wilmington NC 28409-4103, U.S.A. : cfastinc@msn.com or cfast@sigmaxi.org E-mail

Phone 1(USA)-910-794-9492 : 1(USA)-901-794-9492 Fax

### **Dr Geoff Meaden**

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geoff.meaden@canterbury.ac.uk 44(UK)- (0 for domestic)-1227-767700 (Ext. 2327) Phone

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### Mr Vasilis D. Valavanis

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PO BOX 2214, 71003, Iraklio, Crete, Greece : *vasilis@her.hcmr.gr* : 30(Greece)-2810-337817 : 30(Greece)-2810-337822 E-mail Phone Fax Homepage (HCMR): http://www.hcmr.gr Homepage (MGIS): http://arch.imbc.gr

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E-mail : j.wang@abdn.ac.uk

: 44(UK) -(0 for domestic)-1224-273796 Phone : 44(UK) -(0 for domestic)-1224-272396 Fax

Other voluntary supporting members are welcome. Please contact the Convener.

Roles of the supporting members are to promote the Symposium, to assist preparation of the Symposium, to assist various matters during the Symposium and other related matters.

# [FUTURE SYMPOSIA]

The Fishery-Aquatic GIS Research Group organizes this type of Symposium every three years. The Fifth Symposium will therefore be held in 2011 and the venue will be determined later.

# [PREVIOUS PUBLICATIONS]

Abstract Proceedings and Proceedings of the past Symposia (GIS/Spatial analyses in Fishery and Aquatic Sciences Volumes 1-3) are available. For details, refer to the web site at: <a href="http://www.esl.co.jp/Sympo/index.htm">http://www.esl.co.jp/Sympo/index.htm</a>.











