



**LOICZ, GKSS Storm Surge Congress
Risk and Management of current and future Storm Surges,
Hamburg, Germany 13-17 September 2010**

CALL FOR ABSTRACTS – EXTENDED DEADLINE 31st MARCH 2010!

Background:

Recent natural disasters such as Hurricane Nargis in Myanmar and flooding following tropical storm Kathrina underline that storm surges and flooding increasingly represent a global environmental and social threat regularly associated with substantial losses of lives and economic damages. Based on scientific and public debate including IPCC findings we conclude that besides climate change, as one key driver surges and floods are frequently exacerbated by anthropogenic forcing including intensive land and sea use along the river-coast continuum. A recent OECD study of extreme floods in 136 port cities foresees an increase of population and asset exposure of between 2-3 times, and 10 times, respectively, by 2070.

However, scientific information about storms and storm surges still is rather disciplinary whereas practical experiences, cultural perception and knowledge of response options for coastal communities are rather disconnected. A holistic synthesis is lacking and subsequent information flow and debate remain fragmented. “Joined up” thinking may assist to address key questions of major societal concern such as:

1. How do we deal with the present level of risk?
2. How do we respond to changing future conditions?

Answering these questions will be critical in order to enhance our capacity to forecast, prepare and adapt to risks and in order to improve our capacity to respond appropriately on a socio political level.

The Congress:

As a consequence LOICZ together with the GKSS Research Centre, Geesthacht, (Member of the Helmholtz Association of National Research Centres) as well as numerous international and national partners (see call flyer attached) are planning for an interdisciplinary and international Congress to be held in Hamburg 13-17 September 2010:

Risk and Management of current and future Storm Surges.

We strive for a multi stakeholder dialogue and a common view across the scientific disciplines, data providers and coastal users and deciders. The major objective is to overcome the fragmented view on this global phenomenon. By inviting multiple experiences, lessons learned and best practices from coastal stakeholders and users and the latest scientific knowledge to be shared across the multiple audiences the Congress aims to facilitate improved holistic understanding towards better adaptation and mitigation. Sessions will address the following Topics:

- a) Driving factors and scales of storm surges
- b) Contemporary risk and management
- c) History and intercultural perception
- d) The role of scientific information – dealing with uncertainty
- e) Institutional dimensions – dealing with uncertainty

We kindly ask you to distribute this Call for Abstracts widely and strongly encourage you to submit your own abstract under one of the sessions listed above. Please refer to the official call flyer (attached) and the conference websites for more information.

In summary the Storm Surge Congress 2010 may also serve as a forum not only for scientific and technical discussions with the peers and coastal users on the status and future challenges but also for providing an opportunity to identify areas for future joint research and collaboration. The 2nd announcement for this Congress including the draft list of sessions and call for abstracts is attached herewith for your information. Be informed that the **deadline for submission of abstracts will be extended until 31st March 2010**. Further details are made available on the web at the URL:

<http://meetings.copernicus.org/ssc2010/>

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Important Links – The DELTA conference:

This Congress stands in a logical line with another event: “*Deltas in Times of Climate Change*”, which takes place in Rotterdam between 29 September and 02 October 2010 and looks particular into the role of Delta Regions in the life support functions of the Earth System. Storm Surges in such regions will be revisited during this conference and both are linked through cross cutting sessions. For more information see: www.climatedeltaconference.org

Organisation LOICZ/GKSS:

As a core research project of the Earth System Science Programmes IGBP and IHDP, LOICZ, i.e. Land Ocean Interactions in the Coastal Zone, with its global research networks and partners has increasingly focused on coastal vulnerability in the context sea level rise, subsiding coasts and delta erosion due to urbanisation and river management and in particular storms and storm surges. The key objective since 1993 is to provide the knowledge, understanding and prediction needed to allow coastal communities to assess, anticipate and respond to the interaction of global change and local pressures which determine coastal change. Since 2003, LOICZ research includes social, political and economic sciences in order to address the human dimensions of the coastal zone. Central to LOICZ is to explore coastal system vulnerability, risks and options for mitigation and adaptation. Explored are the drivers and changes including global climate change and economic development as well as natural hazards such as storms and surges and how their effects are exacerbated by extensive land and sea use. In particular the challenge is to describe the link between land and sea forcing in a changing Earth System, how this influences coastal processes and, to also consider people's lifestyles and political decision making including response to climate change reflecting in land use and cover. Since 2006 LOICZ is based at the GKSS Research Centre, Geesthacht, Germany (Member of the Helmholtz Association of National Research Centres) and located in the Institute for Coastal Research.

With this information and in the name of the congress organizers I very much hope that this invitation and proposal will find your favourably consideration. We are looking forward to your reply and that this may be a visible step towards future consolidated collaboration.

Yours sincerely



Dr. Hartwig Kremer
(CEO LOICZ IPO)

NATIONAL / LOCAL ORGANISING COMMITTEE (LC)

Heinz Glindemann (Hamburg Port Authority, HPA)
Gabi Gönnert (Landesbetrieb für Strassen, Brücken und Gewässer, LSBG)
Harro Heyer (Bundesanstalt für Wasserbau, BAW)
Thomas Bruns (Deutscher Wetterdienst, DWD)

INTERNATIONAL SCIENTIFIC COMMITTEE (SC)

Paolo Ciavola (MICORE Project, Italy)
Ping-Xing Ding (State Key Laboratory for Estuarine and Coastal Research, ECNU, China)
Craig Donlon (European Space Agency, Netherlands)
Bruce Glavovic (Resource & Environmental Planning, Massey Univ., New Zealand)
Karel Heynert (DELTAWARE, Netherlands)
Kevin Horsburgh (Proudman Lab., Liverpool, United Kingdom)
Pavel Kabat (Wageningen Univ., Netherlands)
Hartwig Kremer (LOICZ International Project Office, Institute for Coastal Research, GKSS, Germany)
Boram Lee (IOC-UNESCO, France)
Jason Lowe (Met Office Hadley Center, United Kingdom)
Nobuo Mimura (Center for Water Environment Studies, Ibaraki University, Japan)
Il-Ju Moon (Cheju National Univ., College of Ocean Science, South Korea)
Sylvin Müller-Navarra (Federal Maritime and Hydrographic Agency BSH, Germany)
Robert Nicholls (Univ. of Southampton - School of Civil Engineering and the Environment, United Kingdom)
Mark Pelling (King's College London, United Kingdom)
Ramesh Ramachandran (Anna Univ., Inst. for Ocean Management, India)
Steven Solomon (Geological Survey of Canada, Canada)
Hans von Storch (Institute for Coastal Research, GKSS, Germany and Climate Campus, Germany)
James Syvitski (Community Surface Dynamics Modeling System, Univ. of Colorado-Boulder, US)
Keith Thompson (Dept of Oceanography, Mathematics, Statistics, Dalhousie Univ., Canada)
Georg Umgiesser (Institute of Marine Sciences, ISMAR-CNR, Italy)

CONTACT

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CONGRESS STRUCTURE

The congress will be organised in plenary and moderated poster sessions. Parallel sessions will be avoided; cross-disciplinary exchange is encouraged. Plenaries will be organised along thematic subjects, introduced by key notes.

Poster sessions will be introduced to plenary as oral summaries by selected SC experts. They will subsequently be organised in marketplace format where thematic contributions can be reviewed.

Moderated concluding round tables are planned to foster discussions and a synthesising statement.

IMPORTANT DATES

- Abstract Submission and Registration starting December, 2009
- Abstracts due 31 March, 2010
- Paper acceptance May, 2010
- Conference 13-17 September, 2010

REGISTRATION

Online registration starts in the beginning of December 2009.

ACCOMMODATION

A list of hotels for congress participants will be published on the congress website when registration starts.

Please hand in your abstracts and register for the Storm Surges Congress on our Website:
<http://meetings.copernicus.org/ssc2010>

Support by:



STORM SURGES CONGRESS

RISK AND MANAGEMENT OF CURRENT AND FUTURE STORM SURGES



2nd ANNOUNCEMENT AND CALL FOR ABSTRACTS

EXTENDED DEADLINE FOR ABSTRACT SUBMISSION: 31ST MARCH, 2010



13. -17. SEPTEMBER, 2010
UNIVERSITY OF HAMBURG
HAMBURG, GERMANY
[www.loicz.org/storm2010]

ORGANISING INSTITUTIONS:

Land-Ocean Interactions in the Coastal Zone (LOICZ), Core Project of the IGBP and IHDP and GKSS Research Centre, Institute for Coastal Research



Besides climate change, storm surges are exacerbated by anthropogenic forcing including intensive land and sea use along the river-coast continuum. A recent OECD study of extreme floods in 136 port cities foresees an increase of population and asset exposure of between 2-3 times, and 10 times, respectively, by 2070.

TWO SCIENTIFIC AND SOCIAL QUESTIONS ARE CRITICAL:
How do we deal with the present level of risk?
How do we respond to changing future conditions?

Answers require interdisciplinary approaches and a coupling of scientific and coastal user discussions. Overcoming fragmented views on a global concern on short and long-term time scales by a joined up thinking is needed involving the assessment of threats and opportunities emerging across the social-ecological system scale of coasts.

Multiple stakeholders to be involved comprise:

- Coastal engineering, and harbour authorities
- Coastal zone and river basin management
- Urban, coastal and marine planning
- Disaster and risk management
- Social development organisations
- Economic planning and insurance business
- Operational oceanography
- Storm surge modellers
- Coastal geoscientists (erosion, subsidence)
- Weather and forecasting services and
- Climate research

The Storm Surges Congress 2010 aims to engage the relevant actors and to serve as an enabling forum for exchange of state-of-the-art expert knowledge and practitioners' views.

The objective is to work towards a common perception of key concerns including options of mitigation and adaptation. Practitioners and researchers are invited to delineate future challenges for science, and dialogue across science-policy-practice interfaces.

The goal is to foster our mutual understanding of relevant spatial, temporal as well as institutional scales that need to be considered in response to current and future storm surge risks.

Photograph: Ron Mulder, www.stormfoto.nl

SUGGESTED SESSION OUTLINE

Regions should cover all relevant areas such as polar regions, temperate to sub-tropical and tropical systems, deltas and tidal estuaries.

a) Driving factors and scales of storm surges

- Does climate change matter?
- How does surge hazard vary globally?
- Why are so many coastal cities sinking?

Papers in this theme might address:

Climate and climate change

Variable storminess

Sea level rise/ salt water intrusion

Geological processes (e.g. erosion)

Water works and coastal defence

Oil, gas and groundwater extraction – anthropogenic subsidence

Urbanisation, demographic change in coastal areas and deltas

b) Contemporary risk and management

- What are the present risks?
- What are the differences between tropical and extra-tropical storms and surges
- People and assets: who pays for the risks?

Papers in this theme might address:

Risk assessment

Coastal urbanisation and assets at risk

Damage and insurance issues

Managing extra tropical storm surges

Managing tropical storms surges

c) History and intercultural perception

- What did our ancestors do: retreat, protect or advance?
- Acts of God or acts of nature: what was the historical experience of surges?
- How do the media see extreme surge events?

Papers in this theme might address:

Historical accounts of storm surge risk

Awareness of storm surge risk

Perception of dynamics and drivers of storm surges

Media coverage and presentation of natural risks, storm surge events, responses, and predictions

Future perceptions of surge risks

d) The role of scientific information – dealing with uncertainty

- What is the state of the art in modelling/predicting and projection
- What do we need to know to plan for a regionally more stormy world?
- Should we protect or retreat against increasing surge risk?

Papers in this theme might address:

Information needs of coastal stakeholders

Defining the bottom line – reference water levels and current and future flood protection

Dealing with uncertainty

Current capacity of modelling, predictions, and forecasting

Expected level of future (5-10 years horizon) modelling, forecasting and projections

Knowledge gaps, e.g. hydrodynamics and bathymetry

The role of remote sensing

Scenarios of future tropical and extra tropical storminess

Scenarios of sea level rise

Vulnerability and risk assessment

The role of managed realignment

Usage of scenarios for adaptation and planning

Calculation of the design level

e) Institutional dimensions – dealing with uncertainty

- How do our institutions, civil society and public actors respond to storm surges?
- What is the role of warning systems?
- Can good governance handle the risks?

Papers in this theme might address:

Institutional dimensions of storm surge response

Civil society as organisational force

Public bodies as organisational force

Management scales

Warning systems: Present and future

Technological progress to improve the information basis

Effectiveness of hazard lines or set back lines

Current reflection of risk and response in governance

Institutional response to uncertainty

Abstracts

Abstracts need to be submitted and organised in a way to feed into the thematic sections. The SC and LC will take responsibility to review and select abstracts for oral or poster presentation. Please hand in your abstracts on our website.

EXTENDED DEADLINE FOR ABSTRACTS: 31ST MARCH, 2010