











## Registration and abstract submission:

www.gfz-potsdam.de/events/2012/egu\_topical\_meeting

Workshop is limited to 60 participants.

## Key dates :

Abstract submission closes: 08. May 2012
Notification of acceptance: 08. June 2012
Registration opens: 11. June 2012
Registration closes: 03. September 2012

#### Conference fee:

50,-€

A limited number of travel grants is available.



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## **International scientific committee:**

## **Axel Bronstert,**

Institute of Earth and Environmental Science, University of Potsdam, Germany

### Francesco Cioffi,

Department of Hydraulics and Transport, La Sapienza University, Rome, Italy

## **Upmanu Lall**,

Columbia Water Center, Columbia University, New York City, USA

#### Bruno Merz,

Section Hydrology, GFZ German Research Centre for Geosciences, Potsdam, Germany

#### Antonello Provenzale.

Institute of Atmospheric Sciences and Climate, National Research Council, Torino, Italy

## Roberto Purini,

Institute of Atmospheric Physics, National Research Council, Rome, Italy

## **Uwe Ulbrich**,

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# **EGU Topical Meeting**

Floods and climate:

Understanding and exploiting the link between floods and climate

## 4. - 5. October 2012

Helmholtz Centre Potsdam -GFZ German Research Centre for Geosciences Germany



# Floods and climate: Understanding and exploiting the link between floods and climate

**Location:** GFZ German Research Centre for Geosciences, Potsdam, Germany

**Date:** 4.- 5. October 2012

The EGU Topical Meeting is aimed at discussing (1) the current state of our understanding of the link between floods, meteorological processes and climate, and (2) novel research and management options for quantifying and exploiting the climate-flood link. We bring together scientists from different disciplines, e.g. hydrology, water resources management, meteorology, climatology, paleo-climatology, paleo-hydrology, to have a broader perspective on floods.

## **Session 1:**

Flood hydroclimatology: The climate context of floods

Keynote speaker: Upmanu Lall,
Columbia University. USA

Traditional flood risk assessment practice in engineering and insurance assumes stationarity and independence. However, there is widespread evidence for many regions that floods tend to cluster in time or space. The session will focus on:

- Quantifying the long-term variation in frequency, magnitude, location and seasonality of floods on different time scales.
- Understanding the interactions between long-term flood variability and macro-climatic patterns, such as regional and global ocean and atmospheric circulation patterns.

## Session 2:

Flood event generation: Interactions of hydrological and meteorological factors

Keynote speaker: Günter Blöschl,

**Technical University Vienna, Austria** 

Extreme floods are typically generated by rare interactions of catchment state and atmospheric anomalies. A better understanding of these hydro-meteorological processes and their interactions can improve flood hazard estimation. The session will discuss:

- Relationships between catchment state, meteorological processes and flood frequency.
- Influence of climate change and human interventions on these relationships.

## Session 3:

Flood risk management: Exploiting the link between climate, meteorological processes and flood probabilities

Keynote speaker: Gero Michel,

Willis Research Network, UK

Although stationarity and independence are convenient characteristics for risk assessment, their violation offers new opportunities for flood risk management. Instead of a constant probability, we may consider flood hazard as a temporarily changing quantity in dependence of climate fluctuations at different time scales. The session will deal with:

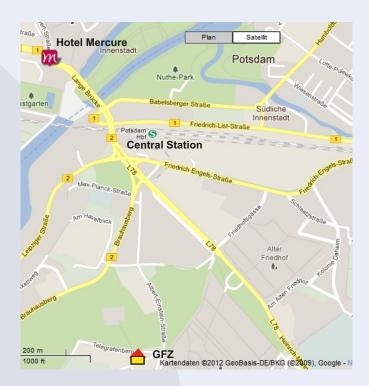
- Research options for exploiting the climate-flood link.
- New risk management options, such as seasonal flood prediction and financial instruments.



#### **Accommodation:**

Mercure Hotel Potsdam City Lange Bruecke 14467 Potsdam Germany

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#### **Conference Venue:**

GFZ German Research Centre for Geosciences Telegrafenberg, House H 14473 Potsdam