



Rijkswaterstaat
Centre for Water
Management



Hydrologische Wissenschaften

Fachgemeinschaft in der DWA

(German Association of
Hydrological Sciences)



Schweizerische Eidgenossenschaft
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Swiss Confederation

Federal Office for the Environment FOEN



The Netherlands
National Committee IHP-HWRP

International Workshop Advances in Flood Forecasting and the Implications for Risk Management Alkmaar, The Netherlands 25-26 May 2010

Background

Floods are major natural hazards affecting large areas and millions of people world-wide every year. They are a regularly recurring phenomenon with strong environmental and socio-economic impacts. Flood prevention and protection will be one of the most important challenges for all parties involved in flood risk management in the coming decades. It will be a continuous task of governmental bodies and scientific institutes, in close cooperation with society and business, to look for innovative methods for flood protection and prevention, especially in a transboundary context.

Recent developments in flood forecasting allow for better quantification of uncertainties that come with flood forecasting modelling. Information about uncertainties must be communicated to decision makers as well as to the general public. The change from pure deterministic to more probabilistic forecasts is a challenge for all stages of flood risk management.

The workshop will present recent developments, look for knowledge gaps and discuss new perspectives.

Objectives

- To introduce new approaches in hydrological and meteorological forecasting
- To discuss ways of assessing, communicating and accepting uncertainty
- To improve practical decision making based on a better understanding of theory
- To foster integrated approaches (model chain, risk assessment, decision and communication)
- To explore ways of integrating predictive uncertainty into decision making processes
- To address the benefits of forecasting systems

The International Commission for the Hydrology of the Rhine Basin (CHR) invites scientists, decision makers and stakeholders in the field of flood prediction, flood prevention and crisis management to discuss these issues during a two-day workshop.

Structure and workshop themes

The workshop is divided in three plenary working sessions:

Theme 1: New approaches to flood forecasting

Keywords: Forecasting systems (HYDROLOGY, METEOROLOGY)
Quantification of uncertainty
Ensemble and probabilistic forecasting

Theme 2: Aspects of decision making for flood damage prevention

Keywords: Understanding and enhancing public's behavioural response to flood warning information
General principles of theory - versus actual practice
Boundary conditions and drivers of decision making (economy)
Integrated decision support systems (DSS)
Decision making under known uncertainty (risk informed decision making)

Theme 3: Acceptance and communication of flood warnings

Keywords: Verification of forecast and warning
Assessment of predictive uncertainty
Communication of uncertainty
Communication systems
Human factor (psychological aspects of forecasting and warning)
Common language
Role of media/competing services
Training/preparedness

Provisional programme and timetable

Day 1 – 25th May 2010

Registration – from 08.30 a.m.

09.00	Welcome by Manfred Spreafico, president of CHR
09.15	Welcome by Roeland Allewijn, Director Division Water and Use, Centre for Water Management
09.30	Keynote by Günter Blöschl – Technical University Vienna
<i>Theme block 1 – New approaches to flood forecasting</i>	
Chair: Johannes Cullmann / Rapporteur: Eric Sprokkereef	
10.15 – 10.45	Advances in Flood Forecasting with Delft-FEWS – Martin Ebel, Deltares
10.45 – 11.15	Tea/Coffee – Posters
11.15 – 11.45	Meteorological ensemble forecasting – Paul Becker, German Weather Service
11.45 – 12.15	Quantification of uncertainties in hydrological forecasting – Ezio Todini, University Bologna
12.15 – 13.15	Lunch
13.15 – 13.45	The Cost731 Action- Propagation of uncertainty from meteorology into hydrological models – Massimiliano Zappa, Swiss Federal Research Institute, WSL Birmensdorf
13.45 – 14.15	A flexible approach to flood modelling – Huub Savenije, Technical University Delft
14.15 – 14.45	Discussion of theme 1
14.45 – 15.15	2 min. oral poster presentations
15.15 – 15.45	Tea/Coffee – Posters
<i>Theme block 2 – Aspects of decision making for flood damage prevention</i>	
Chair: Günter Blöschl / Rapporteur: Sebastian Kofalk	
15.45 – 16.15	Decision support systems and decision making under known uncertainty - Jörg Dietrich, University of Hannover
16.15 – 16.45	Decision support in the response phase during actual flooding in the Netherlands – Kees van Ruiten, Deltares
16.45 – 17.15	More information is not always better: coping with uncertainty in water management, Marcela Brugnach, University of Twente
17.15 – 17.45	Quantification of uncertainty in flood risk assessments - Bruno Merz, GFZ German Research Centre for Geosciences
17.45 – 18.15	Discussion of theme 2
19.30	Participants' dinner

Day 2 – 26th May 2010

Theme block 3 – Acceptance and communication of flood warnings

Chair: Michael Bruen / Rapporteur: Peter Krahe

09.00 – 09.30	On the way to Ensemble Hydrological Forecasts: Lessons learned from MAP D-PHASE – André Walser, MeteoSwiss
09.30 – 10.00	Acceptance and communication of flood warnings – Volker Angres, ZDF German Television
10.00 – 10.30	Warning communications and communication warnings - Dominique Bérod, Swiss Federal Office for the Environment
10.30 – 11.00	Tea/Coffee – Posters
11.00 – 11.30	The media do not report on forecasts, they report on events – Michael Schanne, Zürcher Hochschule für Angewandte Wissenschaften. Institut für angewandte Medienwissenschaft
11.30 – 12.00	The role of affect in communicating flood risks – Heinz Gutscher, University of Zürich
12.00 – 12.30	Discussion of theme 3
12.30 – 13.00	Summary and conclusions of the workshop
13.00	Closing of the workshop

Evening event

Participants' dinner near the conference centre on 25 May at 19.30 pm

Language

Working language of the workshop will be English

Registration and organizational details

Participation is limited to approximately 60 persons. Please confirm your participation in the workshop, indicating on the registration form if you would like to contribute with a poster. Oral presentations will be given by invited speakers only. The standard time for presentations is 25 minutes, with additional 5 minutes for clarifying questions and discussion. At the end of the first thematic block there will be time for a 2-minute oral presentation of posters.

Speakers and participants who present a poster will be asked to submit an extended abstract of their contribution. The length of the abstract is limited to max 6 pages for oral contributions and max 2 pages for poster presentations. All abstracts will be collected in a book of abstracts and handed out to the workshop participants. Subject to the authors approval the abstracts as well as a pdf version of the contributions will be published on the CHR website. After the workshop a final report will be compiled by the rapporteur. This report will contain a synthesis of the contributions as well as the knowledge gaps and research needs that were found during the workshop.

Deadlines

Registration before **1st February 2010**

(or earlier if the maximum number of participants is exceeded)

Submission of extended abstracts of presentations and posters before **1st May 2010**

Venue

Café Restaurant 'De Notaris', Houttil 18, 1811 JM Alkmaar, The Netherlands.

Fees

Most of the costs of the workshop will be covered by the organisers and sponsors. Participants have to pay a limited contribution for catering (luncheons, coffee breaks).

This contribution amounts to: **€ 70** for the plenary working sessions.

Tickets for the Conference Dinner on 25th April to the amount of **€ 50** must be purchased separately.

Cancellations can be submitted to the CHR Secretariat (info@chr-khr.org) before May 1, 2010 for a 50% refund. After 1st May 2010 no refunds will be paid.

Travel and overnight accommodation must be paid for by the participants themselves. The CHR secretariat can provide assistance in reserving hotel accommodation. A pre-reservation has been made at the Amrâth Hotel (<http://www.amrathhotels.com/en/hotel/alkmaar/home>) at a room rate of 92,50 € per night including breakfast. On the registration form you can indicate whether you would like the CHR secretariat to make a hotel reservation. Rooms can be cancelled without costs till 24th of April 2010. After this date the full room rate has to be paid to the hotel.

Organisers

The invitation to the event is issued by the International Commission for the Hydrology of the Rhine Basin (CHR) in cooperation with the COST731 Action, the Swiss Federal Office for the Environment, the German Federal Institute for Hydrology, the German IHP/HWRP Secretariat, the German Association of Hydrological Sciences, the Netherlands National Committee IHP-HWRP, and the Dutch Rijkswaterstaat. For further information about CHR and about the workshop, please visit our website at www.chr-khr.org.

Participation and registration

All participants have to register for the workshop via the CHR website.

<http://www.chr-khr.org/en/international-workshop-advances-flood-forecasting-and-implications-risk-management/registration>

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For further information, please contact either the CHR/KHR secretariat or one of the members of the coordination committee.