

2nd May 2007

Dear All,

due to the constantly rising number of weather disasters SELEX-Gematronik has decided this year to organize a workshop on

**“Prediction and Monitoring of Flash Flood Events by Weather Radar Systems”
held on 16th - 18th October 2007 at our factory in Neuss, Germany**

The workshop will be held by

**Prof. Chris Collier, TIES University of Salford, UK,
Prof. Witold Krajewski, University of Iowa, USA and
Prof. Ezio Todini, University of Pisa, Italy**

This course will explain how flash floods are forecasted considering the limitations and uncertainty involved in both the meteorological and hydrological aspects of forecasting systems.

How you will benefit:

Understand the theory, design and operation of modern flash flood detection systems with special focus on their limitations. Realize your position and identify your individual, incremental set-up of an integrated, multi-sensor based flash flood detection system.

Special program topic:

Session 2 offers a practical excursion and field experiment with our **new mobile dual polarization radar system METEOR 50DX**. The field test will include the operational set-up of the mobile system, the measurement of data and the data evaluation.

For organizational purposes of the workshop, an early reply is highly appreciated. We would welcome your positive reply until to the 31st August, 2007. Please note that the number of participants to the workshop is limited regarding our special program topic.

Please contact Annette Mohr at +49-2137-782214 or via e-mail a.mohr@gematronik.com.

Assuring you of our best attention at all times, we look forward to meet you at our workshop in Neuss, Germany.

Sincerely yours,



Ulrich Nellen
General Manager

Short Course Registration Form
Tuesday 16th October to Thursday 18th October 2007

1. Attendee	
First Name:	
Name:	
Email:	
Phone:	
Fax:	
2. Your Organization	
Name:	
Address:	
Zip Code	
City:	
Country:	
3. Hotel Accomodations	90,00 Euro (incl. breakfast) per day/per person 3*** Hotel, comfort rooms,
Holiday Inn Düsseldorf-Neuss	Anton Kux Strasse 1 D – 40460 Neuss Phone: +49-2131-184-0 Fax: +49-2131-184-185
	Please contact Annette Mohr directly for your hotel reservations at: a.mohr@Gematronik.com
4. Method of payment	
16 – 18 October 2007 period 3 Days	Workshop Course fee incl. lecture material, CD, lunch and refreshments, field excursion , shuttle service, welcome evening event, surprises, 500 EURO (ea.)
5. Money transfer to:	Commerzbank AG Düsseldorf BLZ: 300 400 00 Acc. No.: 44 00 420
6. Invoice to be send to	
Organization	
Attn	
Address	
Zip Code	
City	
Country	

Details on the Workshop are available at www.Gematronik.com or please contact: Annette Mohr

Phone:
+49-2137-782-214

Fax:
+49-2137-782-11

Email:
a.mohr@Gematronik.com

Questions concerning the workshop or assistance for arranging hotel and transportation should be directed to Annette Mohr by phone or by e-mail a.mohr@gematronik.com
Phone: +49-2137-782-0 www.gematronik.com **Fax:** +49-2137-782-11

Workshop Description

Prediction and Monitoring of Flash Flood Events by Weather Radar Systems held on 16th - 18th October 2007 at our factory in Neuss, Germany

Prof. Chris Collier, TIES University of Salford, UK
and
Prof. Witold Krajewski, University of Iowa, USA
and
Prof. Ezio Todini, University of Pisa, Italy

Floods have a major impact on the global economy and the public safety. Flooding and flash floods are the single most destructive type of natural disasters that strike humans and their livelihoods across the globe. These events are catastrophic by any standard, but we know that their impacts can be lessened with sound investments in modern flash flood detection and monitoring systems.

The goal of the workshop is to show the need and the limits of such integrated systems and to understand the need to continue the challenge and to grow the collaborative effort using modern sensor and data processing technologies. This workshop is our opportunity and contribution to share knowledge, technology, lessons learned and to draw parallels between individual and expert's experiences with flash floods.

We will have a look into warning systems. Critical aspects regarding the quality of any flood prediction are discussed. The importance of accurate real-time provision of rainfall information, high resolution numerical weather prediction forecasts and the operation of hydrological model systems in addition to forecast delivery procedures are explained.



This course will explain how flash floods are forecasted considering the limitations and uncertainty involved in both the meteorological and hydrological aspects of forecasting systems.



Let us join the challenge. Data assimilation and the use of forecast ensembles are both key elements across disciplines. The usage of polarimetric radar system technology and its benefit for a more accurate quantitative prediction of flash floods are discussed.

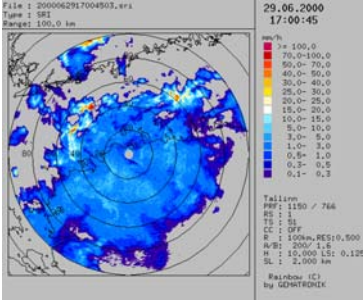
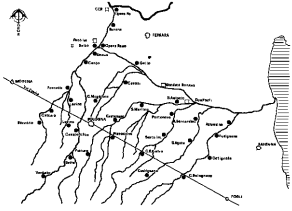



How you will benefit:

Understand the theory, design and operation of modern flash flood detection systems with special focus on their limitations. Realize your position and identify your individual, incremental set-up of an integrated, multi-sensor based flash flood detection system.

Who should attend:

Meteorologists & hydrologists, weather forecasters, physicists, engineers and decision makers. Other professionals who need to understand applications of flash flood forecasting systems.

Workshop Program:	Places:
<p>Tuesday 16th October 2007, 09:00 – 16:00</p> <p>Opening and Introduction by Selex-Gematronik</p> <p>Session 1 Prof. Witold Krajewski, University of Iowa, USA “Focus on the uncertainty quantification of radar-rainfall estimation”.</p> <p>The session will focus on the uncertain quantification of radar-rainfall estimation. The lecturer will discuss sources of uncertainty in radar observations and their conversion to rainfall quantities relevant for operational hydrologic forecasting.</p>	<p>At Hotel Holiday Inn, Neuss</p> 
<p>Wednesday 17th October 2007, 09:00 – 16:00</p> <p>Session 2 Prof. Ezio Todini, University of Pisa, Italy “Integrating Radar and telemetering rain gauges in operational flash flood forecasting systems: an example of the Reno River”.</p> <p>This session illustrates the integration of radar and telemetric rain gauges for an operational flash flood forecasting system: Example of the <i>Reno River</i>.</p>	<p>At factory SELEX-Gematronik GmbH, Neuss</p> 
<p>Special program topic:</p> <p>Session 2 offers a practical excursion and field experiment with our new mobile dual polarization radar system METEOR 50DX. The field test will include the operational set-up of the mobile system, the measurement of data and the data evaluation (dependent on weather).</p>	<p>At countryside nearby Neuss</p> 
<p>Thursday, 18th October 2007, 09:00 – 16:00</p> <p>Session 3 Prof. Chris Collier, TIES University of Salford, UK “Flash Flood forecasting: What are the limits of predictability?”</p> <p>Any warning system must depend upon the accurate real-time provision of rainfall information and hydrological model structures that function during extreme conditions. In this session we review how flash floods are forecasted considering the limitations and uncertainty involved in both - the meteorological and hydrological aspects of forecasting systems.</p>	<p>At Hotel Holiday Inn, Neuss</p> 