

Minutes

IGUR Annual Meeting 2017

Time: 6pm – 7 pm Monday 11 September 2017

Location: Terrace I, Prague Congress Centre, Prague, Czech Republic

Attendees: Karsten Arnbjerg (KAN), Patrick Willems (PW), Sören Thorndahl (ST), Martin Fencel (MF), Jonas Olsson, Vianney Courdent, Jorge Leandro, Vojtech Bares, Simon Beecham (SB) and Thomas Einfalt (TE)

Apologies from Marie-Claire ten Velthuis, Van Nguyen, Daniel Schertzer.

1. Welcome (Simon Beecham and Thomas Einfalt)

Simon and Thomas welcomed everybody and ran through the agenda.

2. Elections of Chair and Secretary

Elections were held for the positions of Chair and Secretary for the next three years. The Chair (Simon Beecham) and Secretary (Thomas Einfalt) were elected unopposed.

3. IGUR activities or those supported by IGUR since the previous meeting

- A paper “Weather radar rainfall data in urban hydrology” has been published (doi:10.5194/hess-21-1359-2017)
We received a comment from Daniel Schertzer. We propose that Daniel takes the lead on a follow-up paper and contacts potential co-authors.
- Report on Novatech 2016
TE, KAN, PW attended but no annual IGUR meeting was held because of low attendance
- ISO – ISO/WD 19926-1:2016 (Meteorology — Weather radar — Part 1: System performance and operation) has been published for discussion, open until Nov 2017. TE explained the procedure and invited volunteers to make themselves known. Any person officially taking part in the working group needs to be appointed by the national standards organisation – or be a WMO representative. The upcoming topics for Part 2 of the standard are centred around data quality control and data usage.
- **PLURISK** project (Belgium): funded by the Belgian Science Policy on “forecasting and management of extreme rainfall induced risks in the urban environment” is currently finishing. The project developed methodologies and software (STEPS-BE) for nowcasting of fine-scale extreme rainfall, two-dimensional fine-scale modelling, mapping and nowcasting of inundations in urban areas (InfoWorks-ICM based, complemented by surrogate, conceptual models), socio-economic urban flood risk quantification, urban flood risk communication and warning, and new sustainable urban flood management strategies (green - blue water; landscape architecture; ecotechnologies). The project focused on selected Belgian cities and aims to support

local authorities, which typically have low capacity in setting up risk quantification, forecasting, control and management systems. A final symposium will be held on 4th October, 2017 in Brussels: <http://www.meteo.be/meteo/view/en/32329368>

- New **climate scenarios** have been set up for **Belgium**, which include scenarios for extreme precipitation, design storms for urban drainage applications, and a climate perturbation tool that can be used by end users for perturbing long-term time series of rainfall and other meteorological variables to the climate scenarios. Weblink: <http://www.kuleuven.be/hydr/CCI-HYDR.htm>
- A new EU-H2020 project “BRIGAID - BRIdges the GAP for Innovations in Disaster resilience” (2016-2020) started. The project focuses on the innovations that increase EU societies’ **resilience against floods, droughts and extreme weather conditions**. KU Leuven (Prof. Patrick Willems) is work package leader for extreme weather related innovations, e.g. innovations that reduce the risk of urban flooding. The project will make an inventory of the innovations, will conduct or support testing of the innovations for their technical performance (in the laboratory or through real field implementation or through model simulations) and social readiness. Also a market analysis will be conducted and, after successful testing, support is given to the development of a business plan and a promotion strategy. Priority is given to nature-based solutions. Weblink: <http://brigaid.eu/>. Innovators who have interest to participate can announce their interest by sending an e-mail to: climate-innovation@brigaid.eu
- Another new EU-H2020 project “PUCS - Pan-European Urban Climate Service” has been launched (2017-2020; Greening the Economy – Innovation Action) to set up a pan-EU service for climate change information reg. changes in extreme rainfall and other meteorological variables. Urban flooding is one of the applications, for which the service will be tested. Several European cities will participate (contact: PW)
- In the **FLoodCitiSense** project, TU Delft are working on early warning services for extreme rainfall for urban water management (3 case cities: Birmingham, Brussels, Rotterdam). They are going to work with citizen observatories and crowdsource information. Marie-Claire ten Velthuis hopes that experiences they collect may be useful for others.
- A highly successful **IGUR workshop** on microwave links of IGUR was held on 10 sept 2017 in Prague with 20 participants. The workshop material will be posted on an open science portal (report by MF)
- Jorge Leandro: In the **BMBF Floodevac** project, DWD (German Weather Service) forecast + hydrological model are applied to the Kulmbach + many maps of possible events have been produced in order to construct an event catalogue of discharges. The project is a collaboration between TU München and 8 other universities and Indian researchers.

Within a three-year project, TU München + LMU München + computer centre LRZ are producing risk maps of flash flooding for the state of Bavaria.

- Jonas Olsson described the **MUFFIN** project: Multiscale Urban Flood Forecasting Gap hydrology / hydraulics for severe events and high resolution models, including a catalogue of event impacts. This project involves SMHI + Aalborg University + Alto University + TU Delft
- 3000 microwave links have been collected by KIT (Harald Kunstmann) in real time for research purposes
- In Göteborg there is a show case on micro wave links (microweather) by SMHI

4. News from the JCUD (Karsten Arnbjerg-Nielsen)

New members of the JCUD are Manfred Kleidorfer + two others. Jeroen Langeveld is the new Chair. Jiri Marsalek wants to step down as a secretary but there is no other candidate yet. The next ICUD will take place in Melbourne in September 2020.

5. Future activities

- Planned activities (1)
The following ideas for future research cooperation by the IGUR were discussed at the previous IGUR meeting – for each of the following topics it was suggested that a one-page overview should be produced. We need to discuss the currency of this list and whether other new topics should be added:
 - a. on “radar measurements / data processing” (in parallel to the ISO standard working group) (Thomas Einfalt)
 - b. on “spatial rainfall for design” (Karsten Arnbjerg-Nielsen)
 - c. on “continuous rainfall simulation” (Simon Beecham)
 - d. on “multidecadal climate oscillations” (Patrick Willems)
- Planned activities (2)
Daniel Schertzer wrote that ENPC intends to resubmit the ITN Urban-Step (deadline on the beginning of 2018) focused on new technologies for rainfall measurement and modelling for adaptation to increased extreme events affecting urban areas. Those interested in contributing are welcome to contact Daniel (daniel.schertzer@enpc.fr).
- Forthcoming conferences and workshops
 - UrbanRain18 workshop, Pontresina, Switzerland: 4-8 December 2018 (infos: <http://www.urbanrain.ethz.ch/>)
 - 13th International Conference on Hydroinformatics (HIC), Palermo, Italy: 1-5 July 2018 (Infos: <https://www.hic2018.org/>)
IGUR session: climate change session with publication possibility
 - 11th International Conference on Urban Drainage Modelling (UDM), Palermo, Italy: 23-26 September 2018 (Infos: <https://www.udm2018.org/>)
“rainfall in urban areas” was added as a conference topic (ST)

- EGU session on "Urban Rainfall and Hydrology" (EGU 8-13 April 2018)
- Other conferences of interest
 - European Conference on Radar in Meteorology and Hydrology (ERAD), Utrecht, Netherlands: 1-6 July 2018, Utrecht
- Update of members list and website

MF will look at the website in order to improve it
- Next annual IGUR meeting
 - Pontresina, Switzerland: December 2018

6. Other business

No other business was raised.