

3rd UK National Observers Group (NOG) Meeting

Friday, 21 March 2014

Presentation by
Marie-Claire ten Veldhuis,
Delft University of Technology



RainGain

- Progress and next steps -

National Observer Group meeting - UK

London, 21 March 2014

**Marie-Claire ten Veldhuis
Project Coordinator**



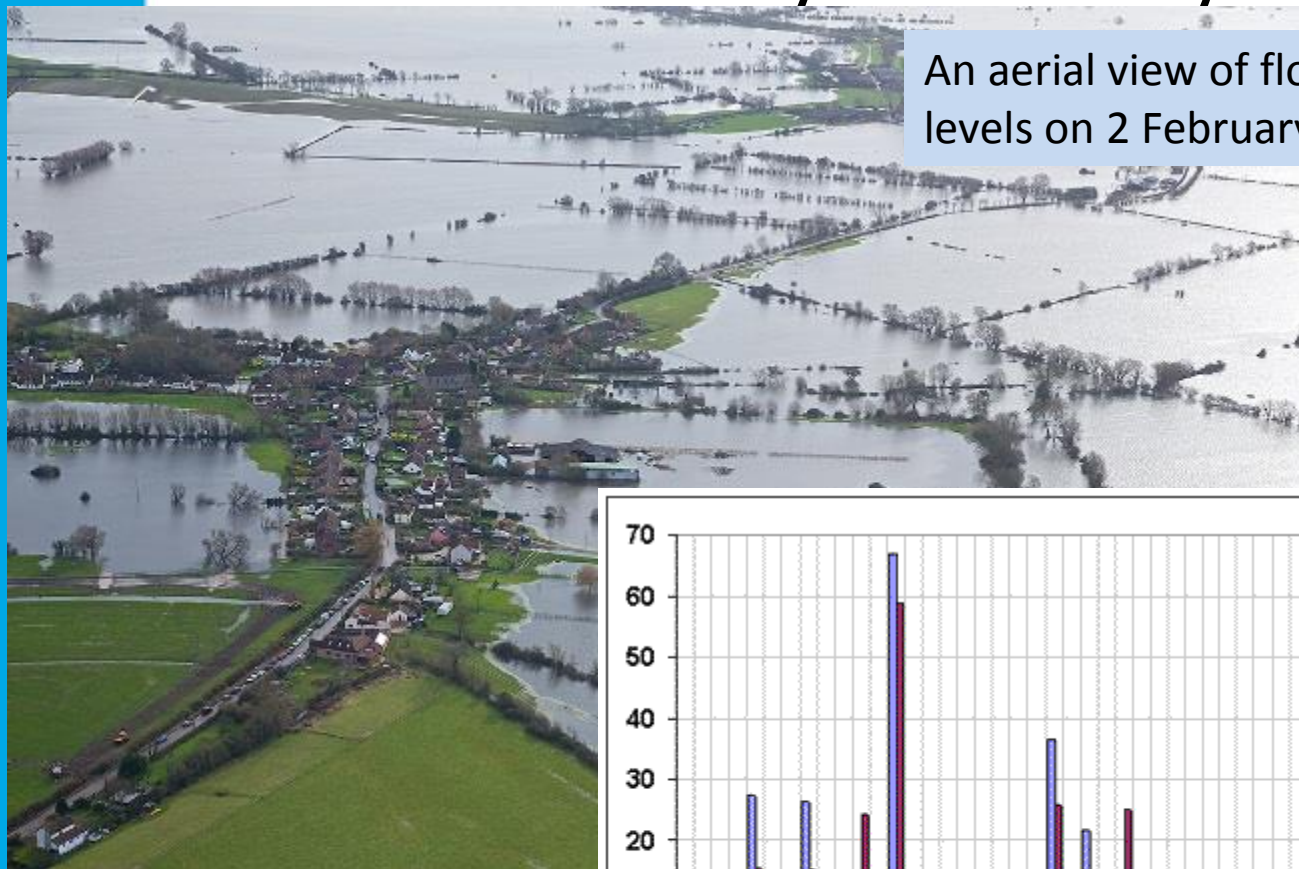
The challenge: coping with heavy rainfall in cities



zappback.nl © 2011

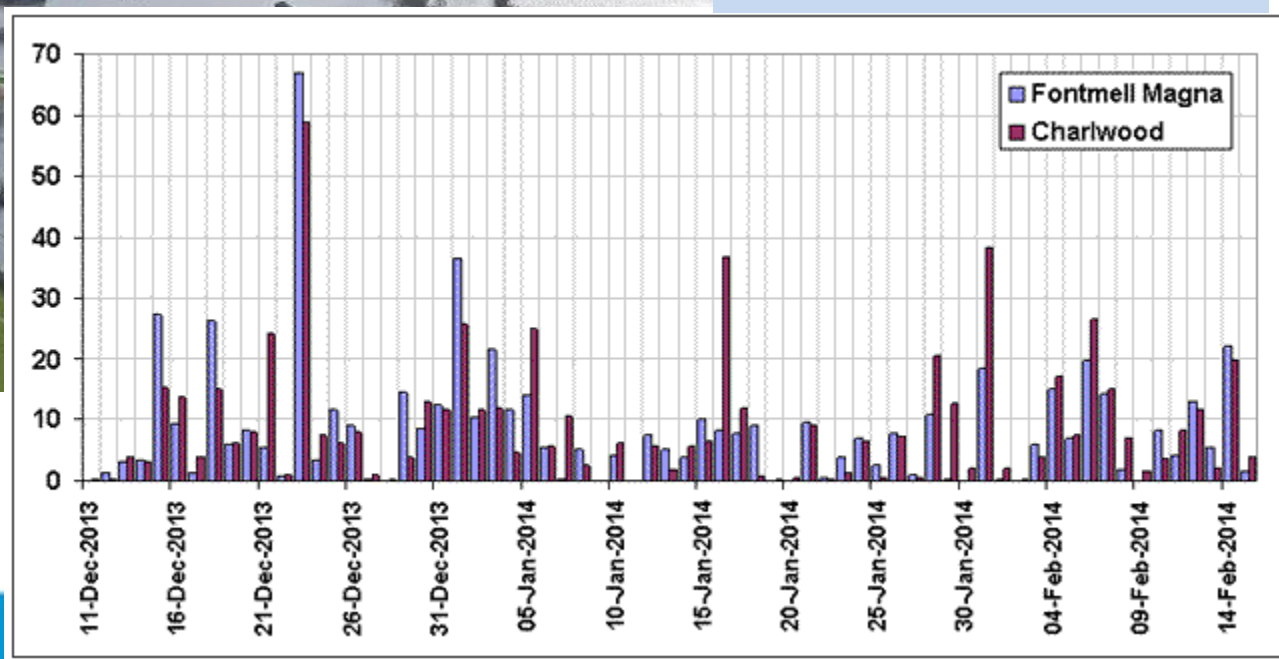
UK Flooding

January – February 2014

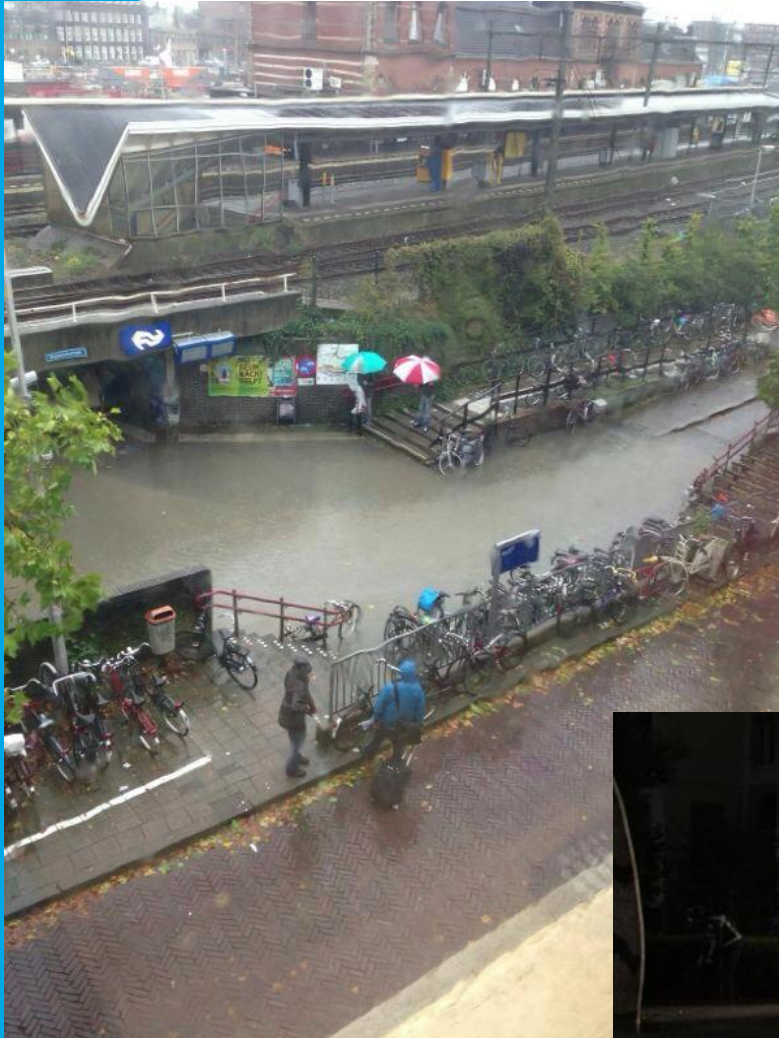


An aerial view of flooding on the Somerset levels on 2 February

Daily rainfall totals (mm) for two stations in southern England 11 December 2013 to 15 February 2014

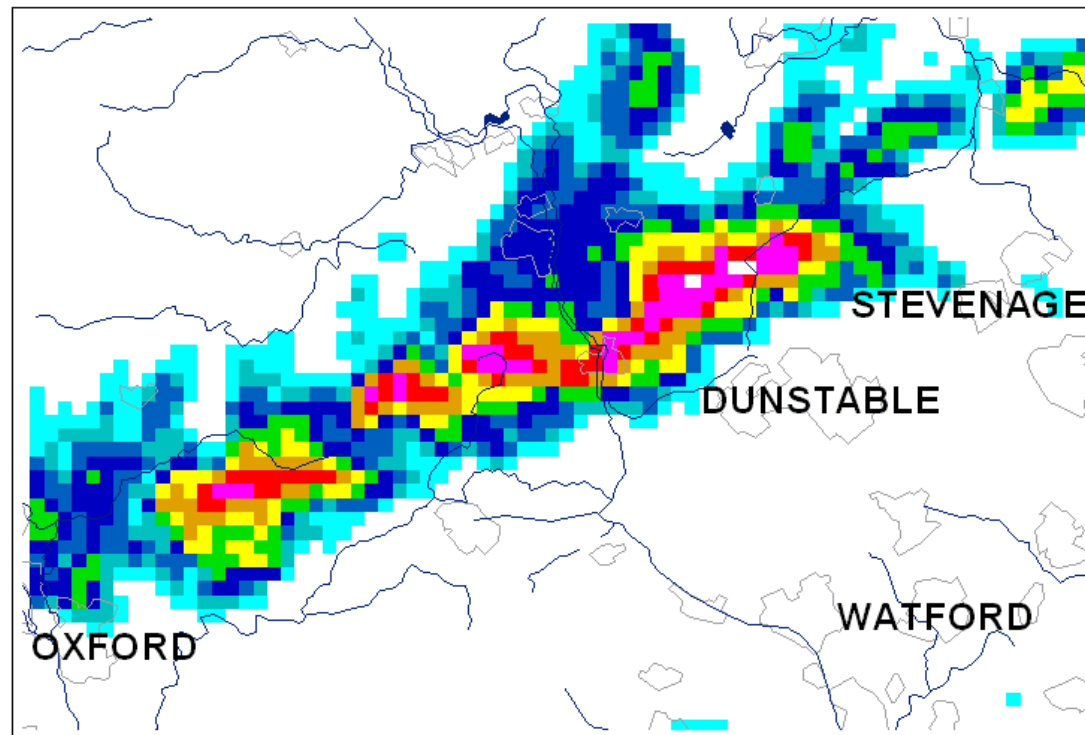


NL Flooding 12-13 October 2013



(Part of) the Solution: increased spatial resolution radar rainfall data

Chenies 1km radar data



1km



10 0 10 20 30 Kilometers



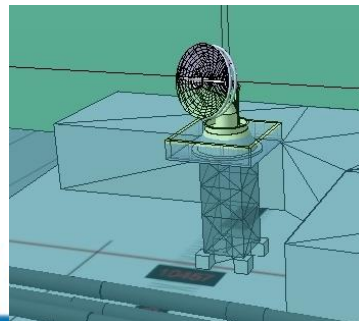
How would high resolution data help?



Progress to date:

➤ High resolution radars:

- Leuven: new algorithms existing Xband radar, single pol
- London: tests Xband radar, single pol
- Paris: new, dual pol Xband radar constructed, installation later in spring
- Rotterdam: new, dual pol Xband radar constructed, installation in spring





RainGain

High resolution rainfall information for improved flood control in urban areas

Investing in Opportunities



This project has received European Regional Development Funding through INTERREG IV B.



INTERREG IVB

Progress to date:

- Rainfall data processing and forecasting:
 - International Workshop Rainfall Estimation: 16 April 2012
 - International Workshop Rainfall Nowcasting: 31 March 2014
 - Review document Fine-scale Rainfall Estimation – Methods and Procedures



Progress to date:

➤ Urban flood modelling:

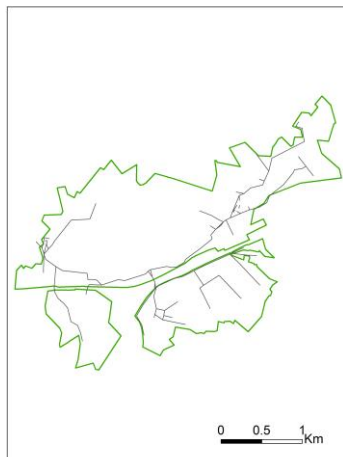
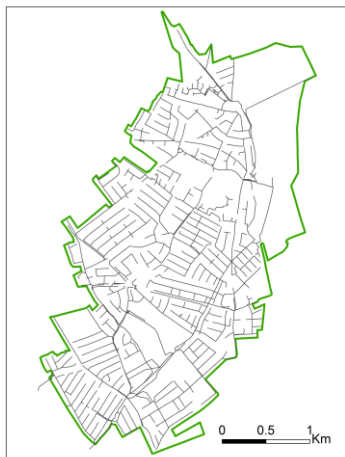
- Flood Models in 10 pilot locations in BE, FR, NL, UK
- Models in 4 pilots compared: response to fine-scale rainfall input (to be continued)

Cranbrook (UK)

Morée-Sausset

Herent (BE)

Kralingen (NL)





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INTERREG IVB

Progress to date:

- Solutions for urban flood control: Local Authorities meeting: 23 October 2013
 - ➔ Examples from France, Belgium, NL and UK
 - ➔ Discussion on insurance schemes for urban flooding



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EVENTS

Upcoming events

Past events

- Local Authorities Meeting
- RainGain at Festival de l'Oh
- National Observers Groups meetings
- Workshops and seminars
- Project meetings
- Kick-off Meeting

RainGain Local Authorities Meeting - 23rd October 2013

The European Local Authorities' Meeting on **High-Resolution Water Management** aimed to foster an exchange on Local Authorities' experiences and the need of high-resolution data and modeling. The feedback from the stakeholders of France, the United Kingdom, the Netherlands and Belgium will contribute to shape the future project's plans. The detailed agenda and the presentations are available on this page (in the right-hand column).



Investing in Opportunities



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INTERREG IVB

Print

DOWNLOADS

pdf Final Programme of the Local Authorities Meeting held on 23rd October 2013

pdf Presentation of the RainGain Project - by M. ten Veldhuis

pdf Use of the Hydrix radar and the Rainpol platform in Antibes - by Aicardi and Emphoux

pdf Use of Multi-Hydro flood model in Manchester - by Richard and Giannola-Murzyn

More information:
www.raingain.eu



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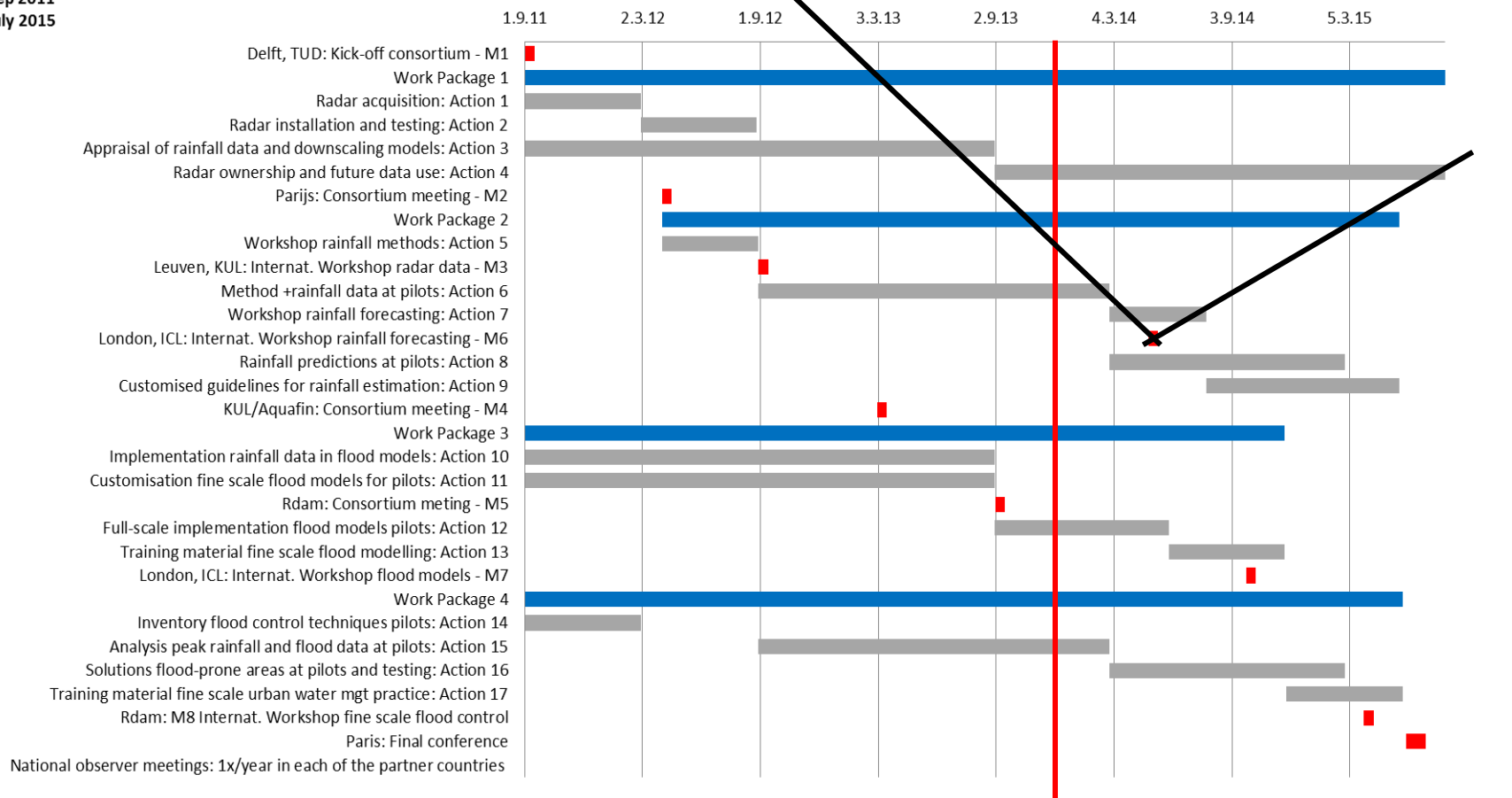
VEOLIA
ENVIRONNEMENT
Ressources & Innovation

Project consortium meeting
1 April 2014: Antwerp/Aartselaar

Workshop Rainfall Forecasting:
31 March 2014, Antwerp

Start date: 1 Sep 2011

End date: 31 July 2015



RainGain - In 2014 -

- Installation of radars in Paris and Rotterdam: spring 2014
- National Observer Groups (BE, FR, UK, NL) in March-June 2014
- International Workshop on Rainfall Nowcasting: Antwerp, 31 March 2014
- International Workshop on urban flood modelling: London, 6/7 October 2014
- RainGain@international events: Weather Radar and Hydrology Conference (WRaH, April 2014); EGU, Special session on Precipitation and Urban Hydrology (April 2014)
- RainGain@National events: VLARIO Day ("Flemish Sewers"); Festival de l'Oh, Deltas and Climate Change etc.



RainGain

Extreme rainfall in cities:

- High resolution rainfall data collection
- High resolution modelling
- Contributing to urban flood resilience

Interested? Want to get involved?

Visit: www.raingain.eu