Impact of sewer condition on urban flooding: a comparison between simulated and measured system behaviour

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Urban pluvial flooding
Assessing flooding
Monitoring network

9th UDM Belgrade September 2012

Rainfall
Water level
Flow

Monitoring survey

Professor Jordanlaan

Jan van Galenstraat
Jan van Galenstraat

Root intrusion
Professor Jordanlaan

Root intrusion
Storm events in UDM Belgrade, September 2012

<table>
<thead>
<tr>
<th>Date</th>
<th>Rain depth R1 (mm)</th>
<th>Rain depth R2 (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/07/2010 - 11/07/2010</td>
<td>32.2</td>
<td>33.0</td>
</tr>
<tr>
<td>25/08/2010 - 27/08/2010</td>
<td>66.0</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Rainfall R1 - Event 10/07/2010 - 11/07/2010

Rainfall R2 - Event 10/07/2010 - 11/07/2010

Rainfall R1 - Event 25/08/2010 - 27/08/2010

Rainfall R2 - Event 25/08/2010 - 27/08/2010
Results

9th UDM Belgrade September 2012
Results 9th UDM Belgrade September 2012

Prof. Jordanlaan - Event 10/07/2010 - 11/07/2010

Prof. Jordanlaan - Event 25/08/2010 - 28/08/2010

Lev13 (US) - Lev12 (DS) modelled
Lev13 (US) - Lev12 (DS) measured
Calibration

Bias for Lev 13

- Bias (m2)
- Time (min)

With defects
Without defects