



Manchester

Londres



Heywood

Manchester

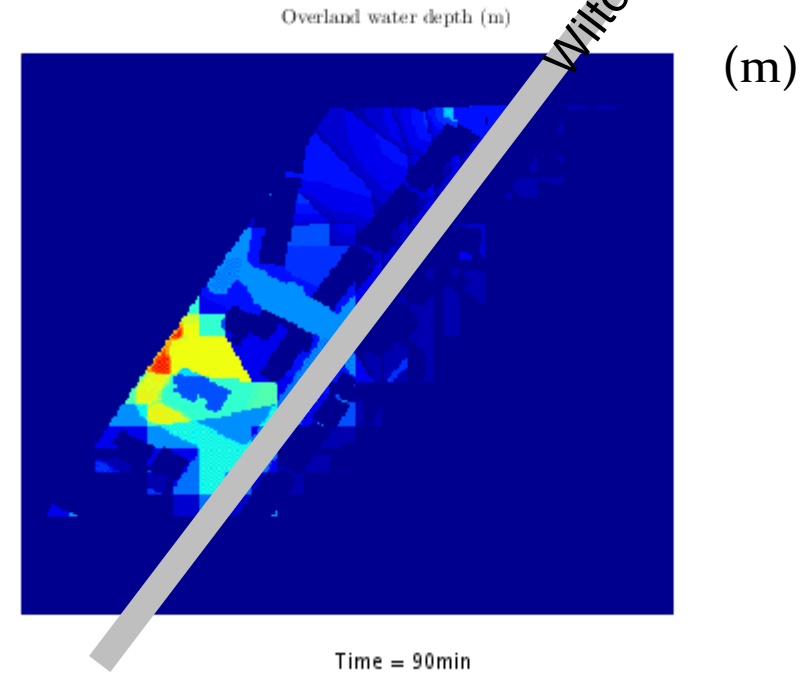
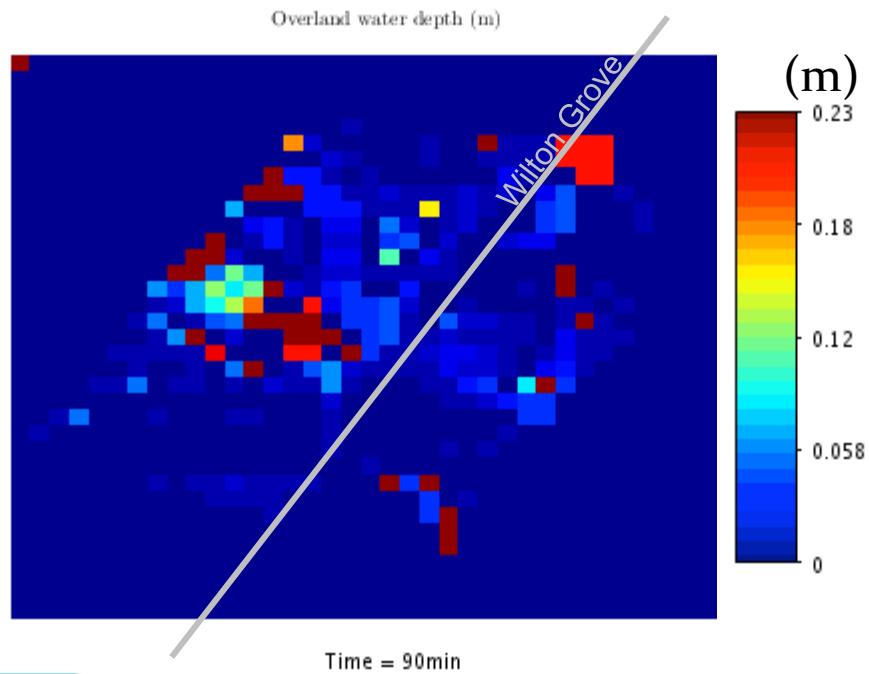


Flood event in Heywood,  
Greater Manchester,  
2004-08-03

### Model parameters:

- 40mm rainfall over 80 minutes, homogenous across area
- 1m spatial resolution
- No flood resilience interventions
- Land cover classes: vegetation, building, road, water
- Homogenous clay soil across area
- No discharge through sewers

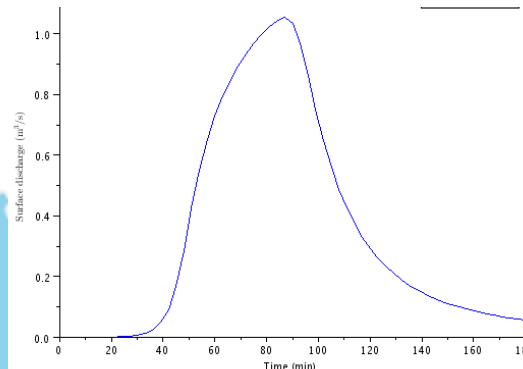
## Water depth at the end of the rain event



### Catchment level

Spatial resolution : 15 m  
Depth max.: 23 cm

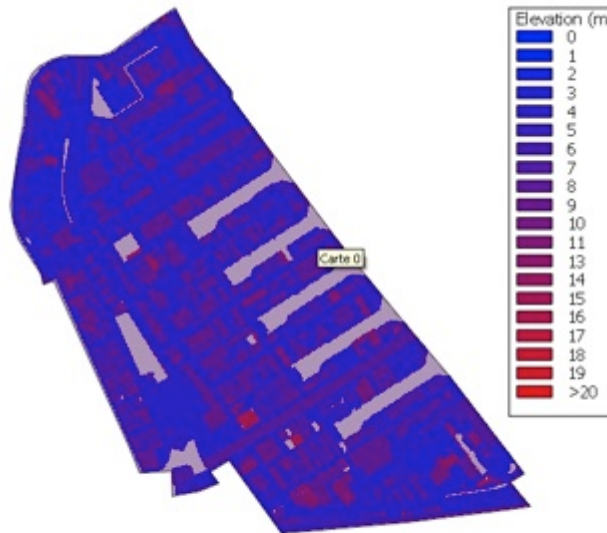
Peak flow at outlet: 1.05 m<sup>3</sup>/s



### Street level (Wilton Grove)

Spatial resolution: 1 m  
Depth max.: 1.2 m

## Rotterdam case study (1.3 km<sup>2</sup>)



- *Work in progress*
- Small slope
  - < 4%
- Complex sewer system
  - pumps, weirs
  - several outfalls
- Mainly impervious
  - roof
  - open paved
- Runoff only when the sewer overflows
- DEM in too high quality
  - natural barrier



# Questions ?

