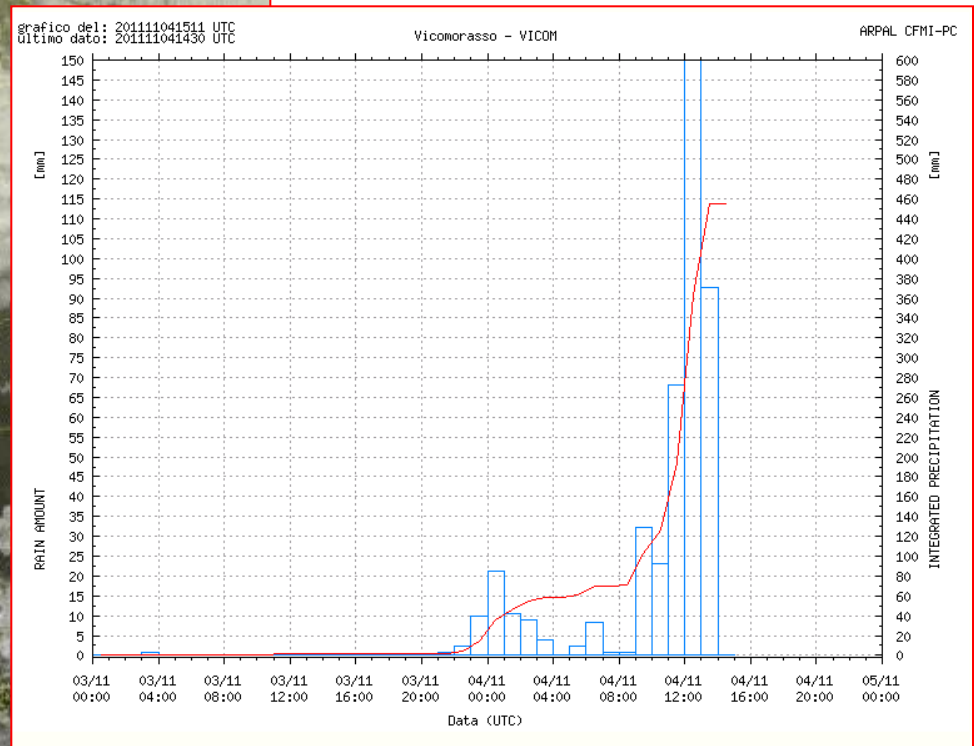
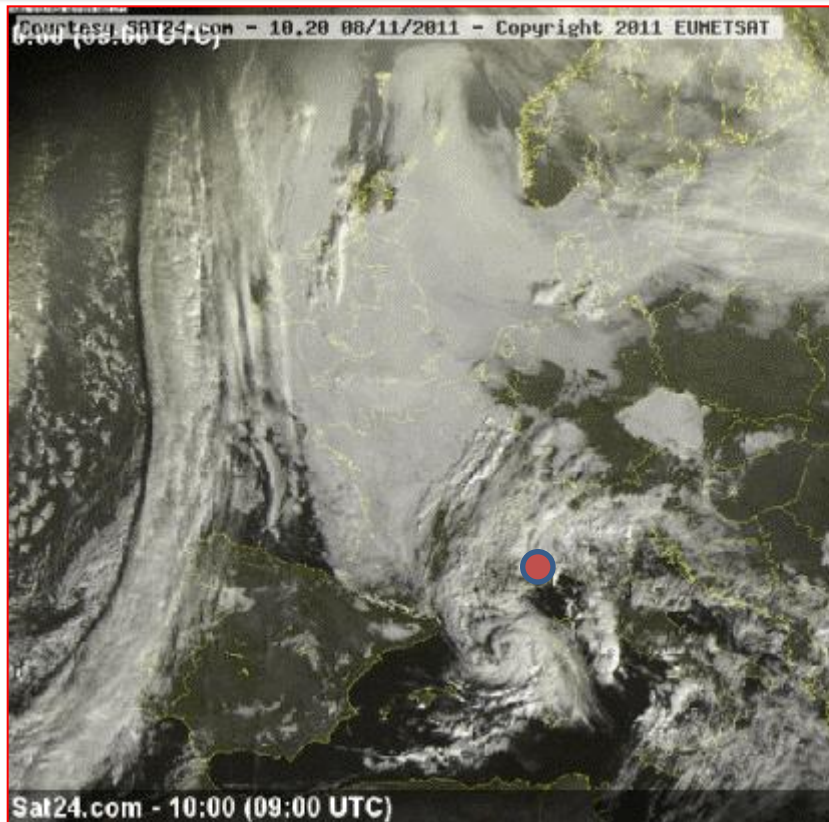


Telling and Measuring Urban Floods: Event Reconstruction by Means of Public-domain Media

The Most Dramatic Flood in Italy in 2011: Genova 4.11.2011



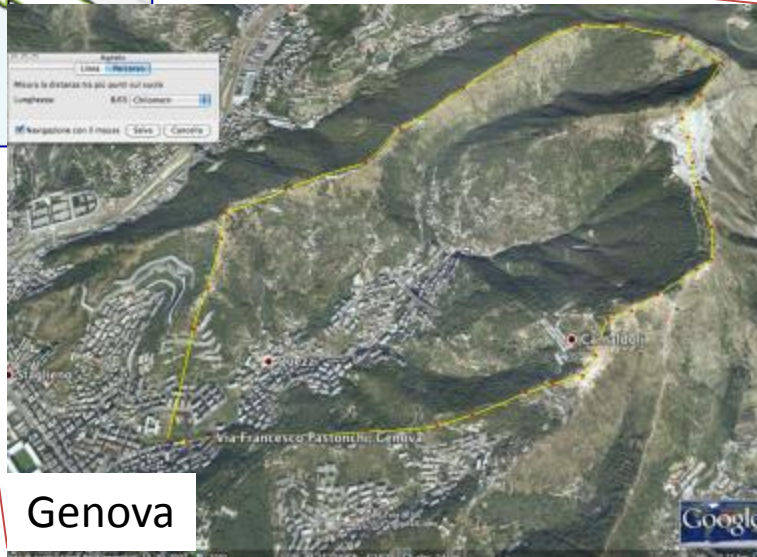
Precipitation Intensity

Tropical cyclone-like "Rolf"

● Genova (Italy)

The Genova (Italy) flash flood event on 4th November 2011

Liguria (Italy)



'Rio Ferggiano'
River Watershed

Genova



Reporter's name: 'Topolino'



Reporter's name: 'Gerryap'



The Most Dramatic Flood in Italy in 2011: Genova 4.11.2011



<http://www.ilsussidiario.net>



<http://www.bergamosera.com>

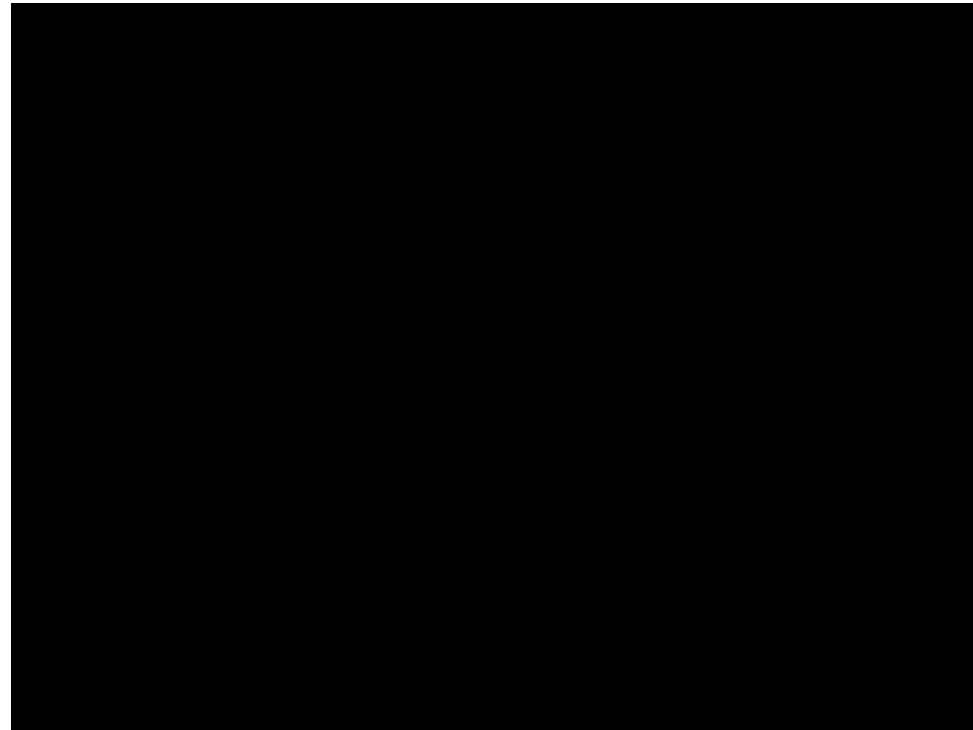


<http://www.blitzquotidiano.it/>



<http://www.ansa.it/>

A Simplified Reconstruction



A Simplified Reconstruction



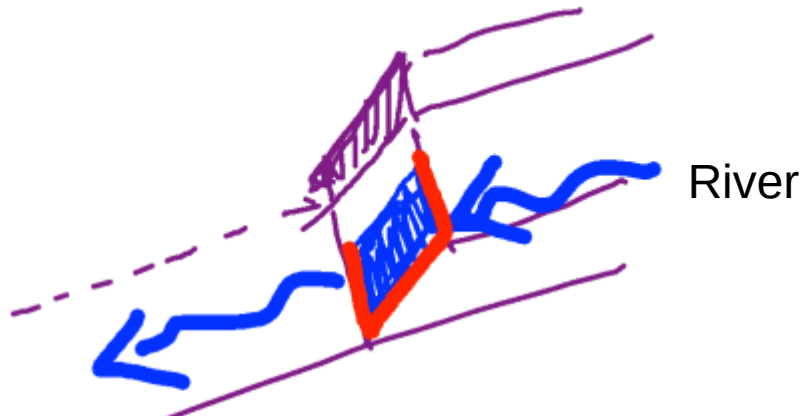
A Simplified Reconstruction



'Rio Fereggiano'

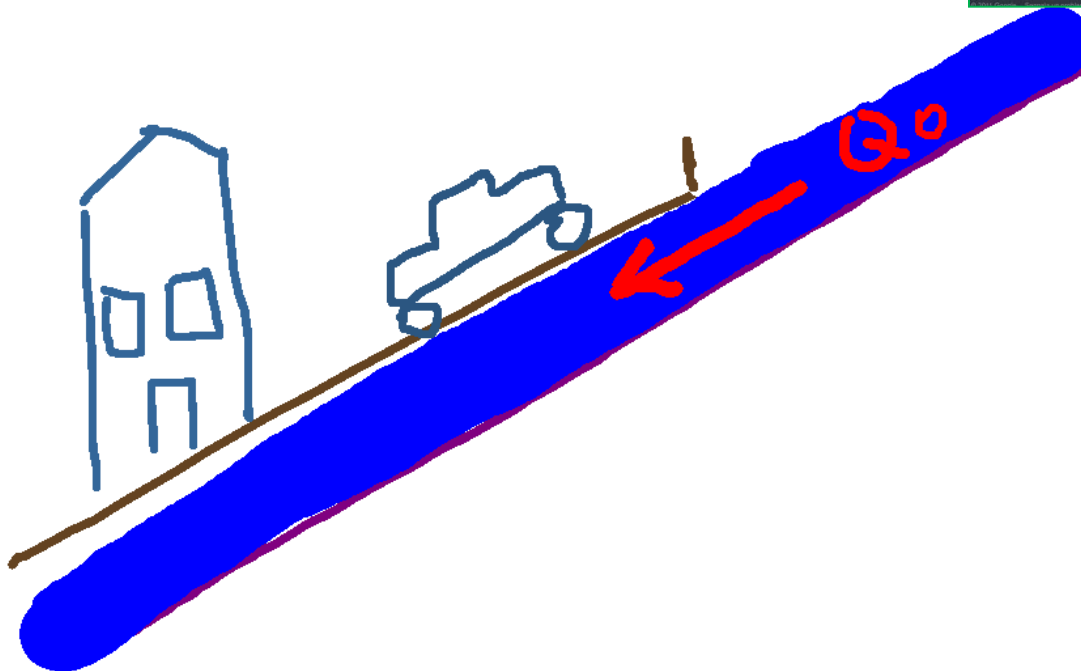


A Simplified Reconstruction

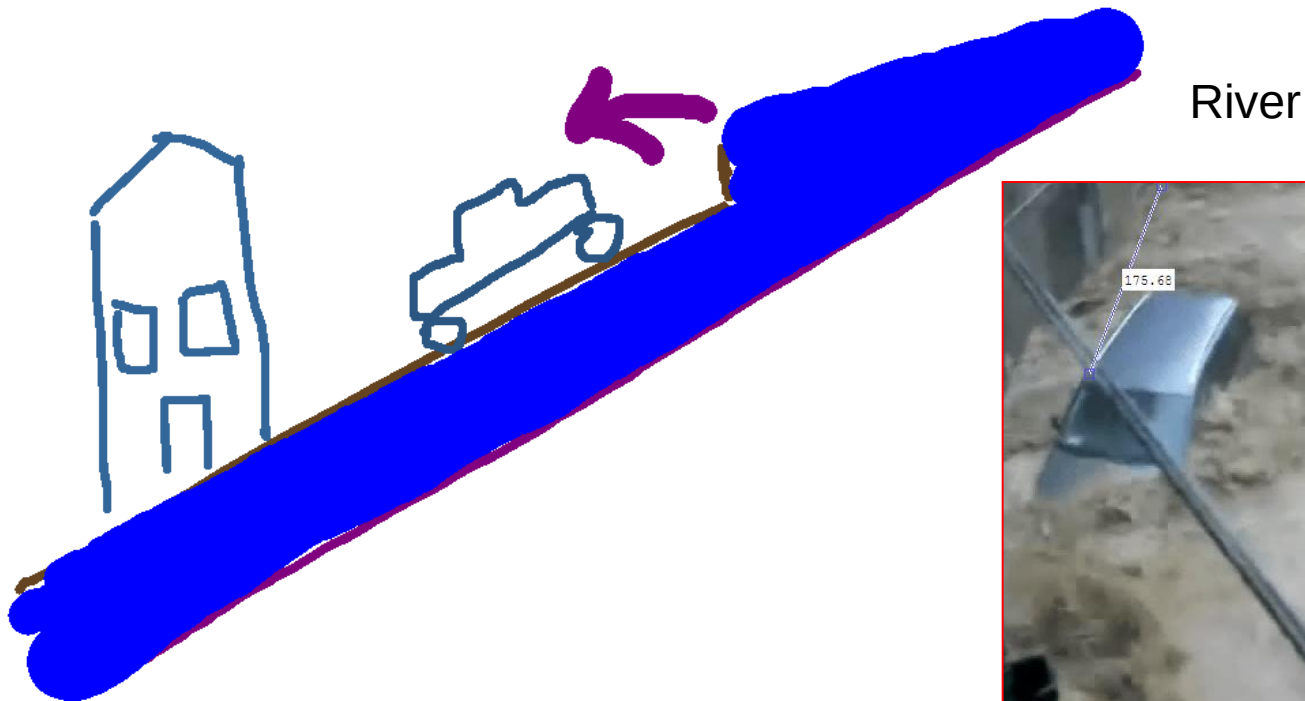
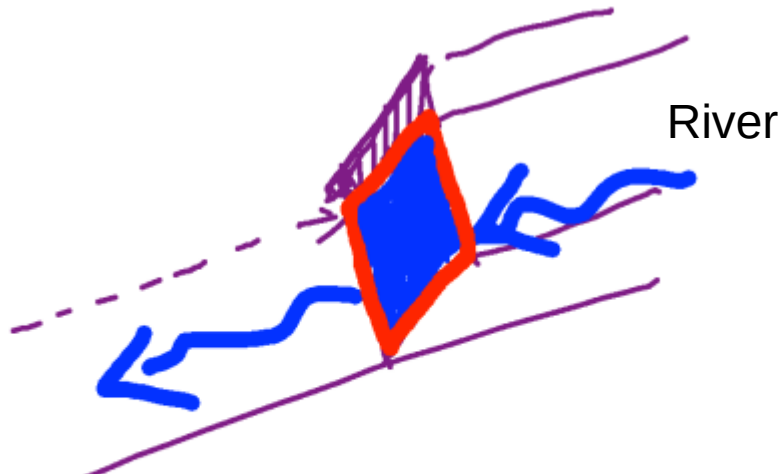


River

Powered by
Google
Maps



A Simplified Reconstruction



More Accurate Reconstruction



11.30 am



12.15 pm



12.30 pm



12.53 pm

One example

Estimated Height of the Flow

Picture from amateur's video



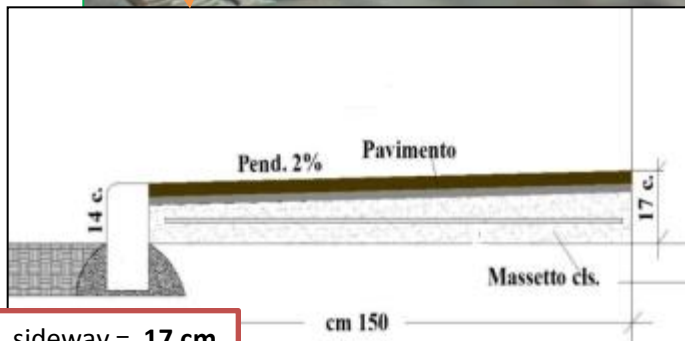
Standard Electric Point



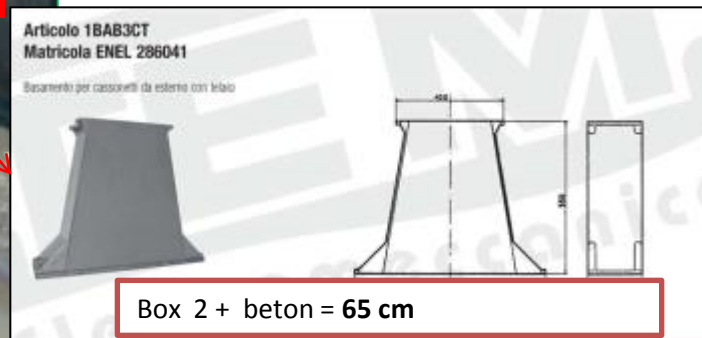
Real height of the water flow during the event

Sidewalk

Picture from Street View



sideway = 17 cm



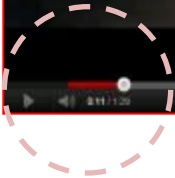
$$\text{Height} \approx 17 + 42 + 65 = 124 \text{ cm}$$



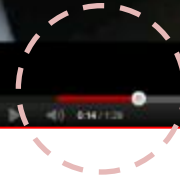
One example

Estimated Speed of the Flow

Picture from 'Gerrap'



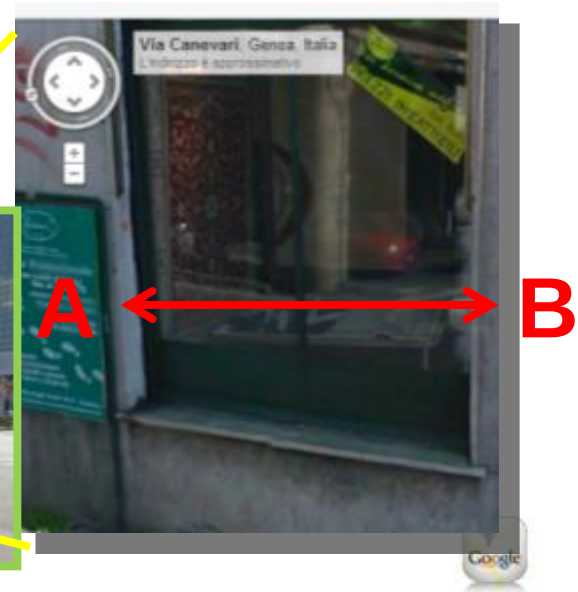
Start time



End time

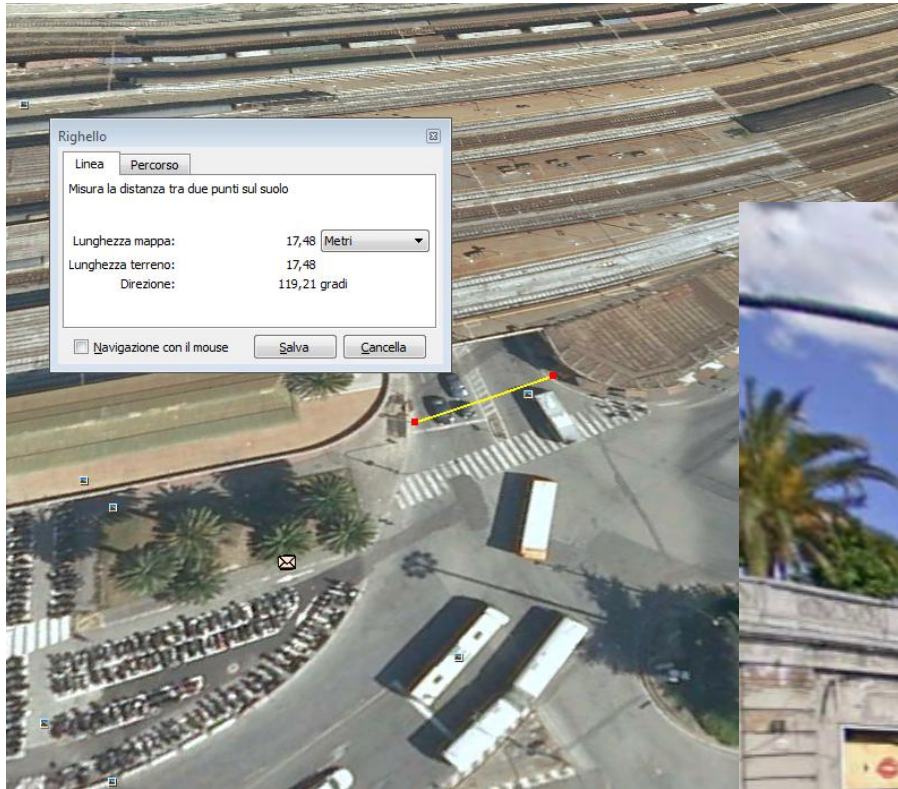
$$V \approx 1 \text{ m/s}$$

Picture from Street View



One example

Estimated Street Width



Width $\approx$ 18 m



Safety Information for the Inhabitants

Click on the icons to get information



Safety information

Amateur video

Information

Name
Geographical coordinates
Time of recording
Video title
Address



Atlante video reporter - Genova, 4 novembre 2011
idrologia.org idrologia.org idrologia.org idrologia.org

naviditalia
Aggiornata il 10 feb

Salire ai piani alti!

Alluvione Genova

Reporter: naviditalia

Lat: 44.418122
Long: 8.962652
Via: Onorato 9/18, 6° piano
Time: 01:18 pm

Indicazioni stradali Cerca nelle vicinanze Salva

This information
is available at
www.idrologia.org