



# FLASH FLOODS AND PLUVIAL FLOODING



## Working Group F Thematic Workshop

# Hydrological extremes or sensationalism?

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**26<sup>th</sup>-28<sup>th</sup> May 2010, Cagliari, Italy**



# Working Group F Thematic Workshop

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## FLASH FLOODS AND PLUVIAL FLOODING

## The case of a flood event that struck the Tiber river basin and the Aniene (Tiber's tributary) river basin in mid December 2008.

Mass media can play a major role in providing public with sufficient and correct information on flood risk and in improving their perception on flood consequences and damages.

**la Repubblica**

**L'emergenza**



**Tevere in piena, Capitale a rischio esondazione**

*La Protezione civile: inizialmente record, poi si accorgono una volta ogni secolo*

**MASCHIOLO**

ROMA — Un'ora prima che la pioggia cominciasse a cadere, il fiume era già al di fuori dei margini. I primi 15 centimetri di acqua erano già in pericolo per le strade, i primi 30 erano un pericolo minaccioso per i ponti e i viadotti, ma non erano ancora pericolosi per i palazzi. Ora, invece, è tutto diverso. L'acqua ha invaso le strade, ha invaso i negozi, ha invaso gli appartamenti, ha invaso le case, i palazzi, i ponti, i viadotti, i tunnel, i sotterranei, ha invaso tutto. E' come se il fiume fosse diventato un mostro, un mostro che non sa più distinguere tra vita e morte, tra sicurezza e pericolo, tra bellezza e orrore. E' come se il fiume fosse diventato un mostro, un mostro che non sa più distinguere tra vita e morte, tra sicurezza e pericolo, tra bellezza e orrore.

**L'onda potrebbe raggiungere i 15 metri, con il rischio di essere più esposta a Roma. Capitale, da pomeriggio, è stata messa in allerta nella via Flaminia, dove si trova il quartier generale della Protezione civile, con l'allarme "alluvione" attivato.**

**Mail Online**

**World News**

**Home News Sport TV>Showbiz Fashion Health Sciences/Tech Money Debate Coffee Break Property Motoring Travel**

**First Venice, now Rome: River Tiber bursts its banks after storms strike Italian capital "like an earthquake"**

Last updated at 6:27 pm on 13th December 2008

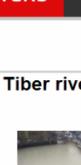


**REUTERS**

**Rome's Tiber river on flood alert**

Fri Dec 12 2008

By Deepa Babington  
ROME (Reuters) - Rome braced for the Tiber to rise again, following the smaller Aniene in bursting its banks.



*26<sup>th</sup>-28<sup>th</sup> May 2010, Cagliari, Italy*



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Via Gallia, 10  
06.7.003.636  
Camer Scontro e prelazione  
di mala su D'Ai capitolino  
Regione Una manovra  
alle spalle dei cittadini  
anneggiati  
Messer I. L'arte del disegno  
di un tempo di viale  
Messer II «Capitulines»  
la porcellana Nerves  
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Dopo l'alluvione  
L'ITALIA SOTT'ACQUA  
Pioggia a dirotto, panico a Ro  
Donna annegga in un sottopasso  
Strade allagate, traffico in tilt, ma per il solo del Comune c'è il solo  
Oggi paura per la piena del Tevere. domani: evuare le zone a rischio  
Maltempo Un giovedì da record  
E oggi il Tevere rischia di esondare  
Ieri in otto ore caduta più pioggia che nella media dell'intero mese di dicembre  
Allagamenti e paura ovunque. Oggi scappato sospeso. Ma l'emergenza continua

**Il Giornale**  
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**la Repubblica** | **1m41 Online** | **World News** | **CNN.com/europe**

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**REUTERS**

**Rome's Tiber river on flood alert**

Fri, Dec 12 2008  
By Deepa Babington  
ROME (Reuters) - Rome braced for the Tiber river to follow the smaller Aniene river over its banks Friday, after days of rain and thunderstorms.

"We see that the flow is increasing, but it is not reaching a level that could be dangerous for the capital city of Italy," said Bertolaso about the Tiber, deeming the situation "crucial but not serious."

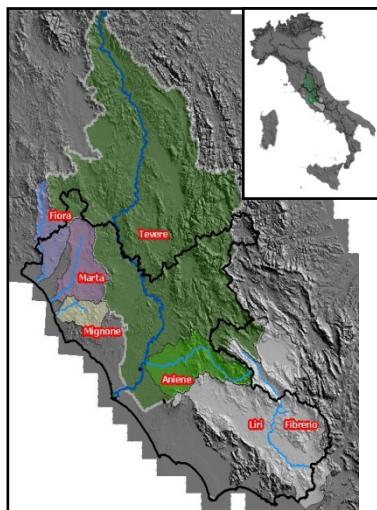
Bertolaso, calling the situation "quite extraordinary," labeled the flood threat and storms as the "fifth most serious situation of the past 100 years."



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Intense precipitation struck the Tyrrhenian Sea side of the peninsula between 10<sup>th</sup> and 12<sup>th</sup> December 2008, inducing a flood event on the Tiber and Aniene (Tiber's tributary) river basins – which captured the attention of the national and international media.



High relevance to this flood event was attributed because of damages occurred in several zones over Rome area, in particular due to failure and inefficiency of urban drainage systems, and to potentially devastating damages which would have occurred if Tiber river had overflowed its banks.



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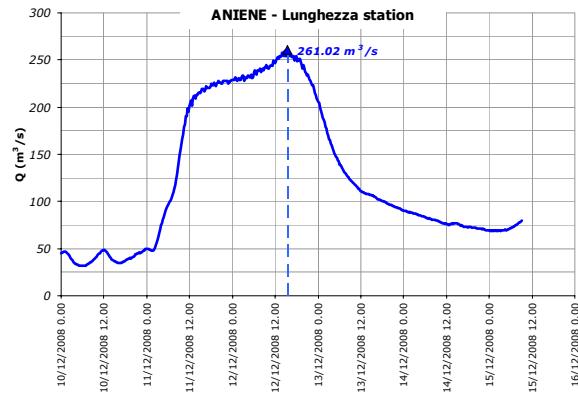
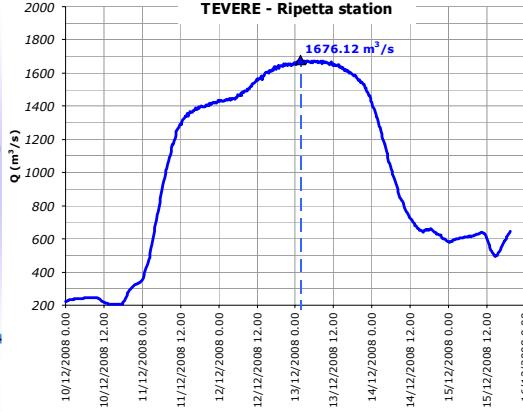
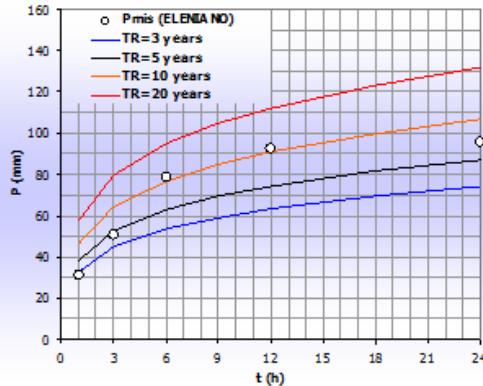
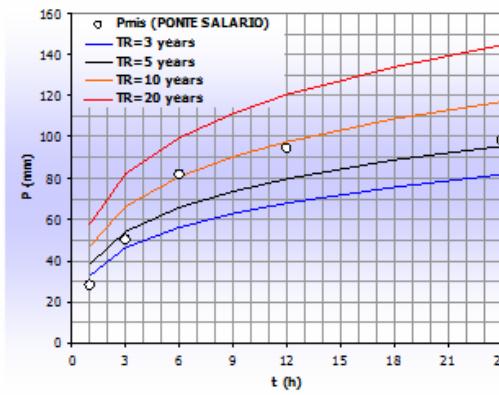
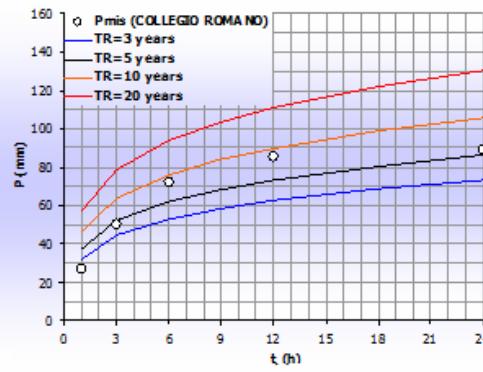
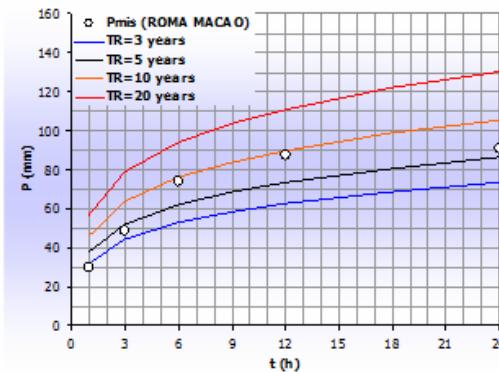


#### SOCIAL AND ECONOMICAL IMPACT OF THE FLOOD EVENT:

- 1 casualty (a woman found dead inside her car, which was submerged in 4 m of water and mud in an underpass nearby Monterotondo).
- About 500 people evacuated.
- Inundations occurred over an area in the north of Rome, between Orte and Castel-Giubileo (Tiber Valley).
- 150 million of Euros of damage estimated just for the Tiburtina Valley – a hub of industrial and commercial activities on the right bank of Aniene river.
- At the Tiber river outlet, Idroscalo and Passo della Sentinella were struck by both the Tiber flood and the Tyrrhenian sea tidal waves: presence of unauthorized settlements
- The most critical situation in Rome was due to some boats that, by breaking loose from their moorings in the surging water together with floating materials, risked to trigger a dam effect at Ponte Sant'Angelo.



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In the urban area of Rome return period was about 10 years for 6 and 12-h precipitation and generally less than 5 years for the other considered durations.

Return period was about 5 years for peak discharge values at TEVERE – RIPETTA and ANIENE – LUNGHEZZA.

The frequency analysis performed from both a pluviometric and a hydrometric point of view deny the “extremity” of such event.