



FLASH FLOODS AND PLUVIAL FLOODING



ISPRA

Istituto Superiore per la Protezione
e la Ricerca Ambientale



**REGIONE AUTONOMA
DELLA SARDEGNA**



**MINISTERO DELL'AMBIENTE
E DELLA TUTELA DEL TERRITORIO E DEL MARE**

Working Group F Thematic Workshop

Hydrological extremes or sensationalism?

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ISPRA – Institute for Environmental Protection and Research, Rome, Italy

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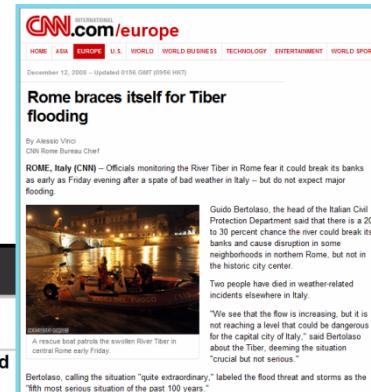
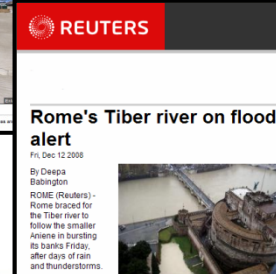
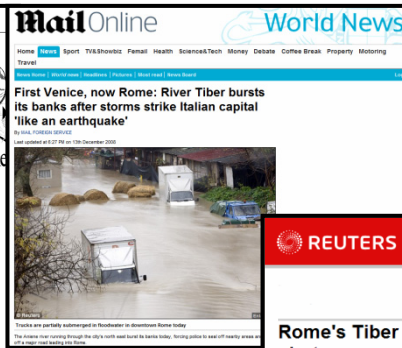


The case of a flood event that struck the Tiber river basin and the Aniene (Tiber's tributary) river basin in mid December 2008.

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.



Maltempo Un giovedì da record
E oggi il Tevere rischia di esondare
Ieri in otto ore cadde più pioggia che nella media dell'intero mese di dicembre. Allagamenti e paura ovunque. Oggi sciopero sospeso. Ma l'emergenza continua





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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.

However, they often present professed experts' view and opinion that might provide a distorted interpretation of the events.

The collage consists of several news snippets:

- Il Giornale Roma:** "L'ITALIA SOTT'ACQUA", "Pioviggia a dirotto, panico a Roma", "Donna annega in un sottopasso".
- Maltempo:** "Un giovedì da record", "E oggi il Tevere rischia di esondare".
- Reuters:** "Rome's Tiber river on flood alert".
- World News:** "Tiber river partially submerged in floodwaters in downtown Rome today".
- Other articles:** "L'Italia sott'acqua", "L'Aniene in piena", "L'Aniene in piena", "L'Aniene in piena".

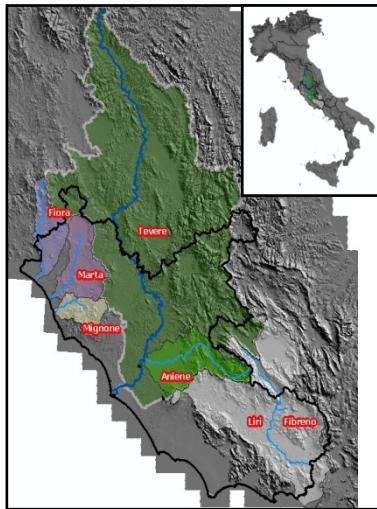


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Intense precipitation struck the Tyrrhenian Sea side of the peninsula between 10th and 12th December 2008, inducing a flood event on the Tiber and Aniene (Tiber's tributary) river basins – which captured the attention of the national and international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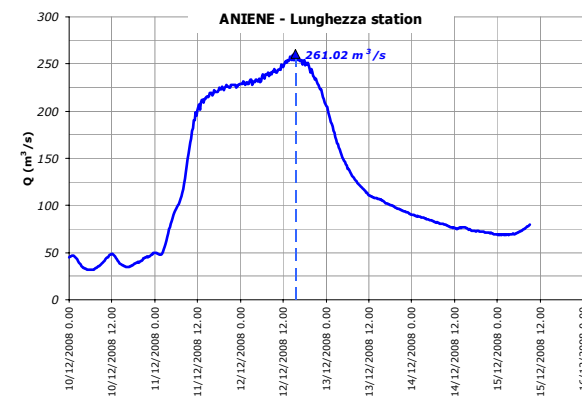
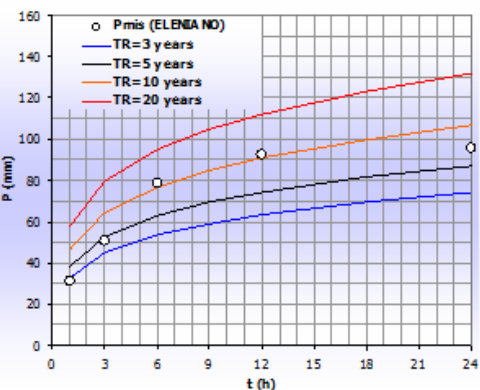
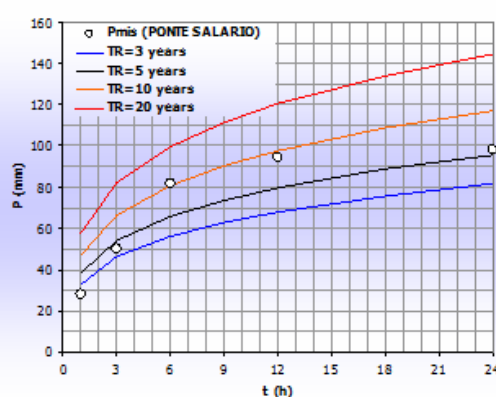
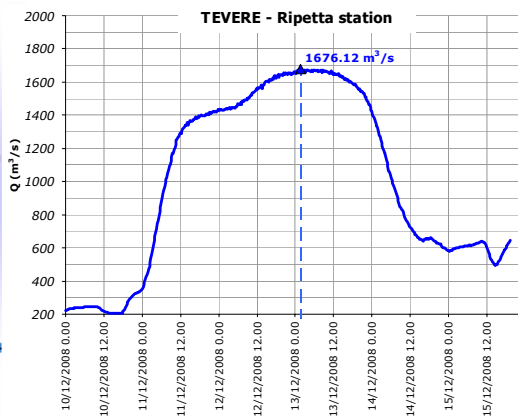
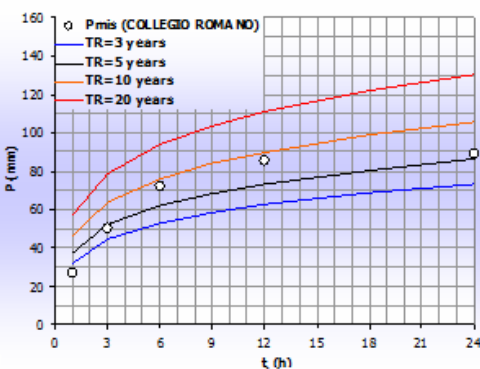
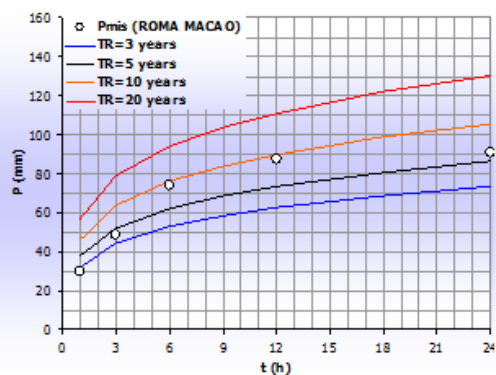


SOCIAL AND ECONOMICAL IMPACT OF THE FLOOD EVENT:

- 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.