



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

FLASH FLOOD EVENTS ON SALERNO COAST (SOUTHERN TYRRHENIAN SEA)

Giovanni Braca ⁽¹⁾, Eliana Esposito ⁽²⁾, Giuseppina Monacelli ⁽¹⁾,
Sabina Porfido ⁽²⁾, Giuseppe Tranfaglia ⁽¹⁾, Crescenzo Violante ⁽²⁾

(1) ISPRA, Institute for Environmental Protection and Research, Via Curtatone, 3, 00185 Rome

(2) CNR-IAMC, Institute for Coastal Marine Environment, National Research Council, Porto di Napoli, Calata Porta di Massa, 80133 Naples

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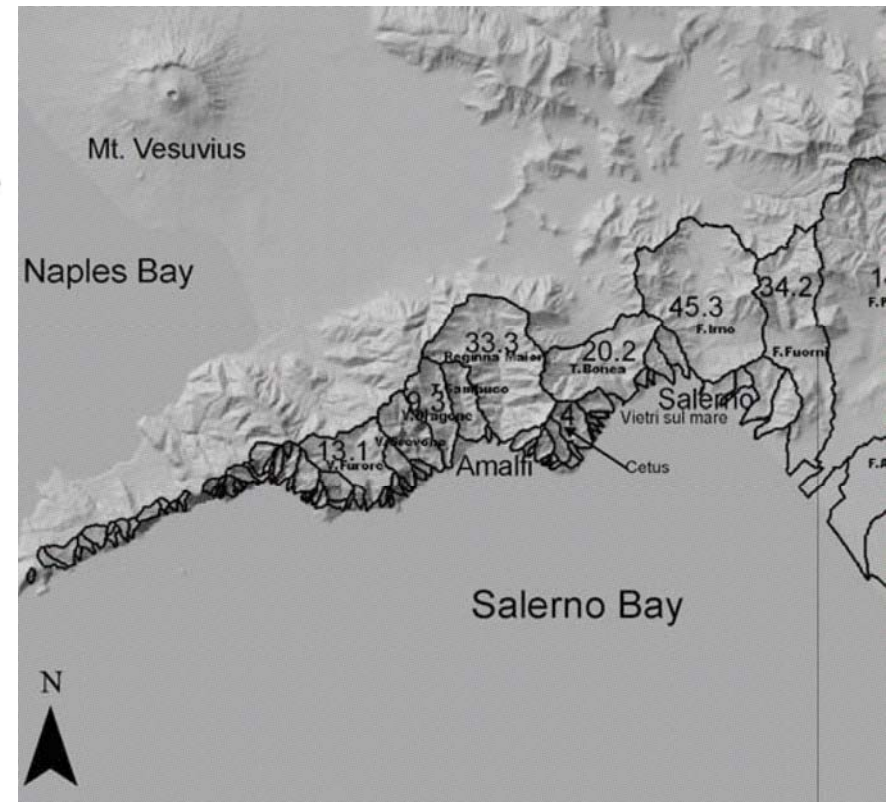


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Geomorphology of the area

- Little basins (max 30-40 km²)
- high orographic gradient from the sea level and short and steep streams
- factors that have a decisive influence on the occurrence of flash floods

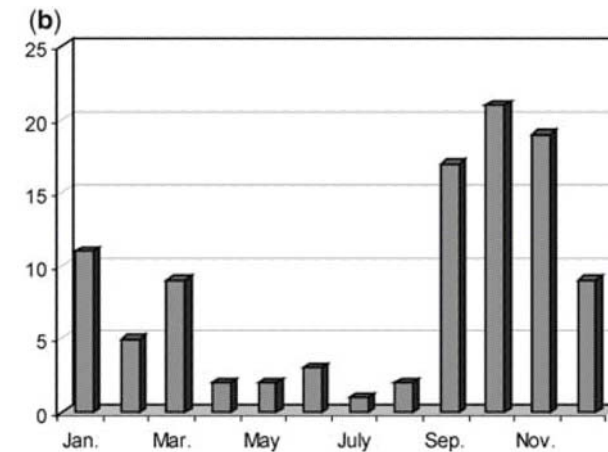
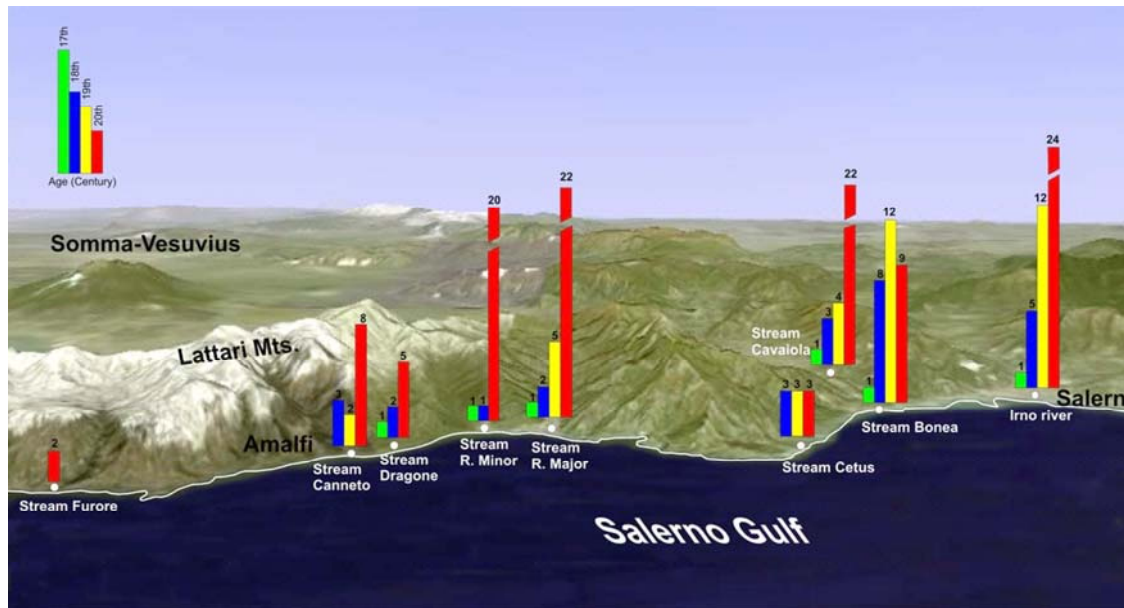




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Recurrence and seasonality of events



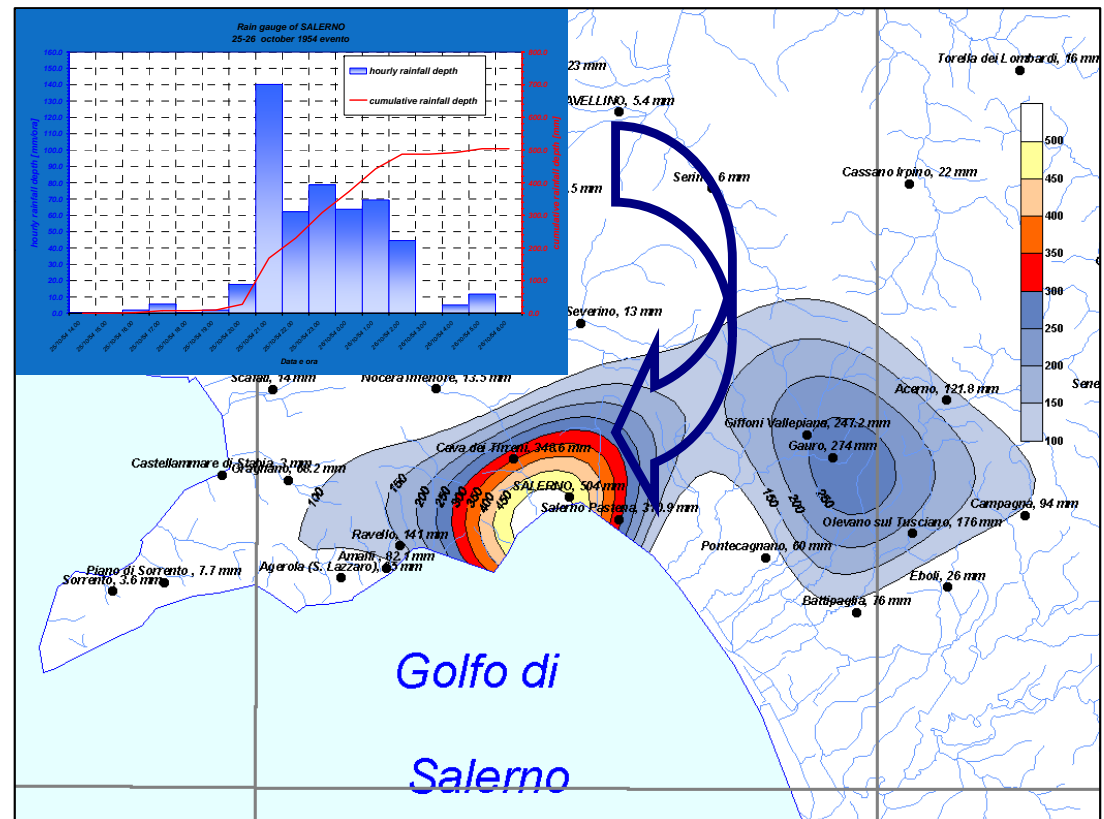
- More than 100 relevant events from 16th century, 7 of which with catastrophic effects



The most intense event

October 25-26 1954
Salerno flash flood

- Total 504 mm during about 11 hours
- Max 150 mm/h



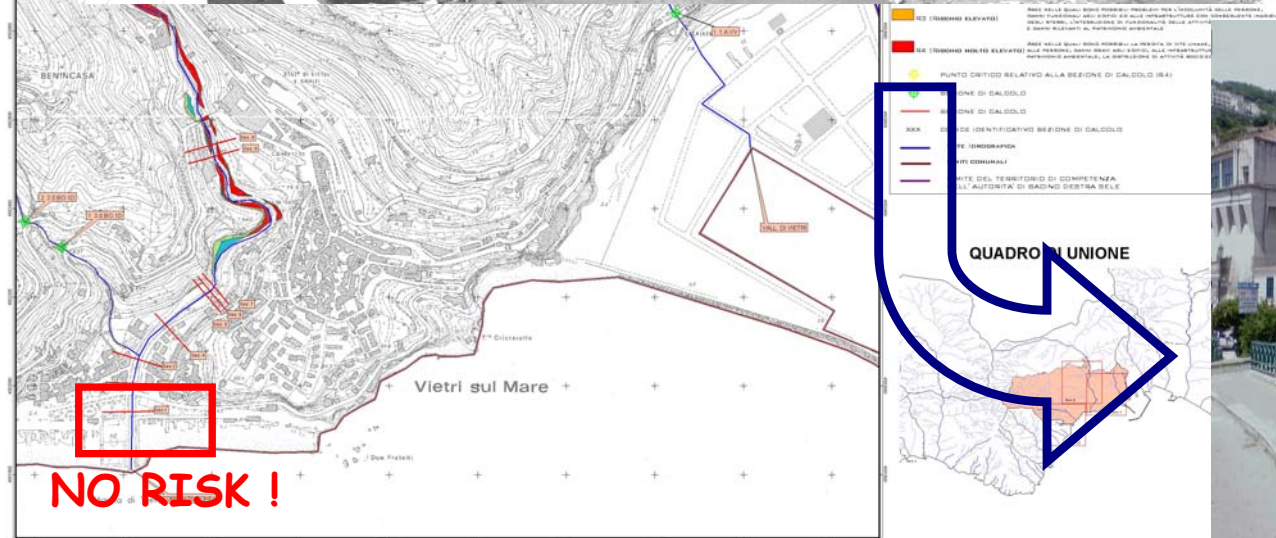


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Risk map of Bonea torrent



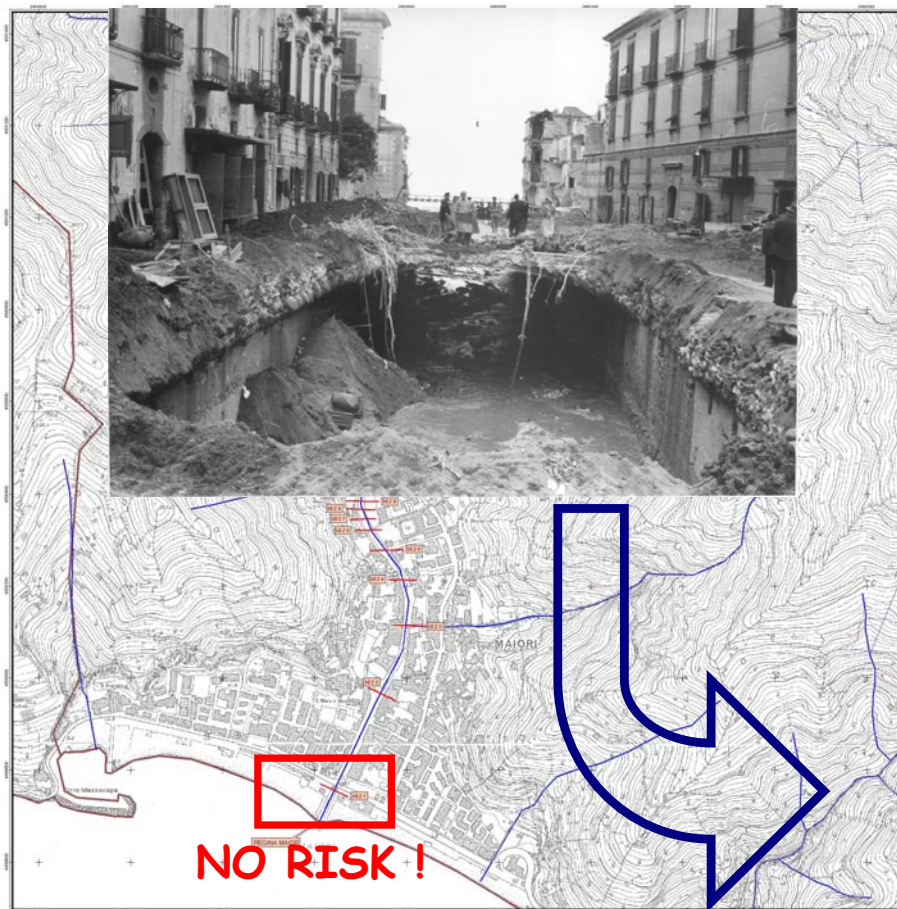


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Risk map of Ragina Major stream



REGIONE CAMPANIA
AUTORITÀ DI BACINO REGIONALE DESTRA SELE
PIANO STRALCIO PER L'ASSETTO IDROGEOLOGICO
RISCHIO ALLUVIONI

CARTA DELLE AREE A RISCHIO

COMUNE DI :
MAIORI

DISEGNO N.3421-15-4
TAVOLA 1/4
SCALA 1/5000

LEGENDA	
FAZIE DI RISCHIO	
■ (1)	RISCHIO MODERATO
■ (2)	RISCHIO MEDIO
■ (3)	RISCHIO ELEVATO
■ (4)	RISCHIO MOLTO ELEVATO





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Conclusions

Flash floods present essential differences as compared with large river floods.

- large sediment and debris transport
- high flow velocities

If these different conditions are not take into account, the risk assessment in the flash flood prone areas could be underestimated

Thanks for attention