

Long term post-flood forensic approach to analyze adaptation at individual scale

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European Geosciences Union General Assembly 2015
Forensic Disaster Analyses – Learning from Disasters

13th April 2015



RETINA project

Research questions

- What are the opportunities for adaptation during the recovery phase in the aftermath of flooding?
- What are the incentives and brakes to adaptation during this period?

Expected results

- Identifying practices and regulations that impede or encourage adaptation

RETINA project

Work packages

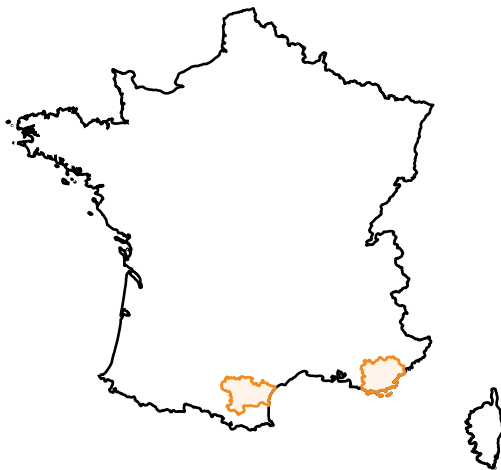
Task 1: Long term forensic disaster analysis

- Institutional level i.e municipality, watershed authority. . .
- Individual level i.e households, firms, farmers

Task 2: Cross analysis of data collected

Task 3: Modelling flood damage propagation within an economic sector

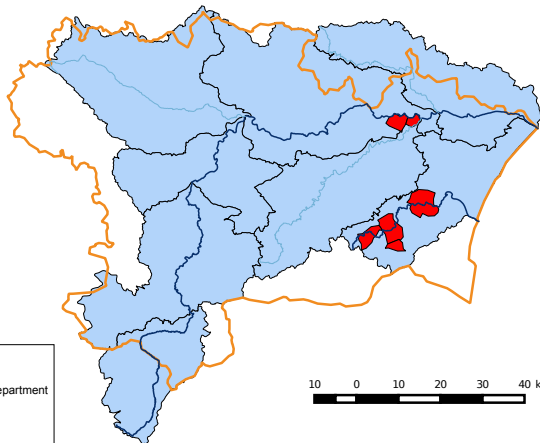
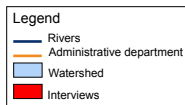
Case studies



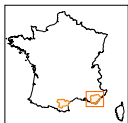
Case studies



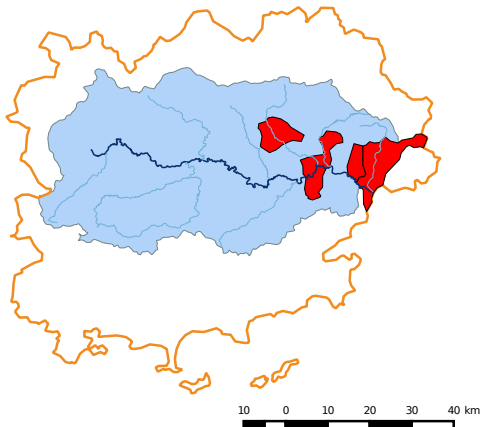
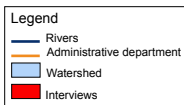
Main flood events :
- 1999
- 2014



Case studies



Main flood events :
- 2010
- 2011
- 2013
- 2014



Individual interviews

Objectives

- Capture individual trajectories
- Analyse the adaptation decision among other
- Analyse constraints at individual scale
 - regulation
 - financial...
- Analyse resources needed for adaptation
 - solidarity
 - information...

Individual interviews

Methodology

- Semi-directive interviews
- Three time steps
 - Before the reference event
 - During and just after
 - Since the reference event until now
- Verbatim transcription
- Discourse analysis

Preliminary results - Focus on relocation

Why focussing on relocation?

- Often promoted as the best way to deal with flood risk
- Poorly studied

French context of relocation

- Special fund created in 1995 dedicated to prevent risk
- Possibility to buy out houses or small firms exposed

Preliminary results - Focus on relocation

Main results for households

- Long term necessary - long procedure (5-10 years)
- Difficulties for temporary re-housing
- Aude CS
 - first uses of relocation procedure
- Var CS
 - even if more recent, still difficult to implement

Preliminary results - Focus on relocation

Main results for firms

- Relocation using national fund not observed
- Prohibition to welcome public but no financial support
- Autonomous relocation (faster / financial issues)
- Limited choices for relocation
- Flood risk may not be the main determinant of decision making (commercial location, possibilities to carry out the activity in the buildings. . .)

Expected future results

Methodological aspects

- What a long term forensic analysis is useful for?
 - Studying long processes (relocation, bankruptcy, reorganisation)
 - Possibility to analyse satisfaction related to adaptation
- Which is the good moment to do it?
 - Faster processes for firms than for households
 - Long term reorganisation of economic sector (wine sector in Aude)
 - Long term planning for municipalities
 - Aude CS, 16 years later, precise story telling and steps in adaptation process

Expected future results

Adaptation during reconstruction phase

- Analyse other adaptation practices
- Incentives and brakes (regulation of urbanization)
- Link between individual and collective adaptations
- Role of economic networks

Credits

This research benefits from funding of
the RDT program of
the French ministry of Environment.

