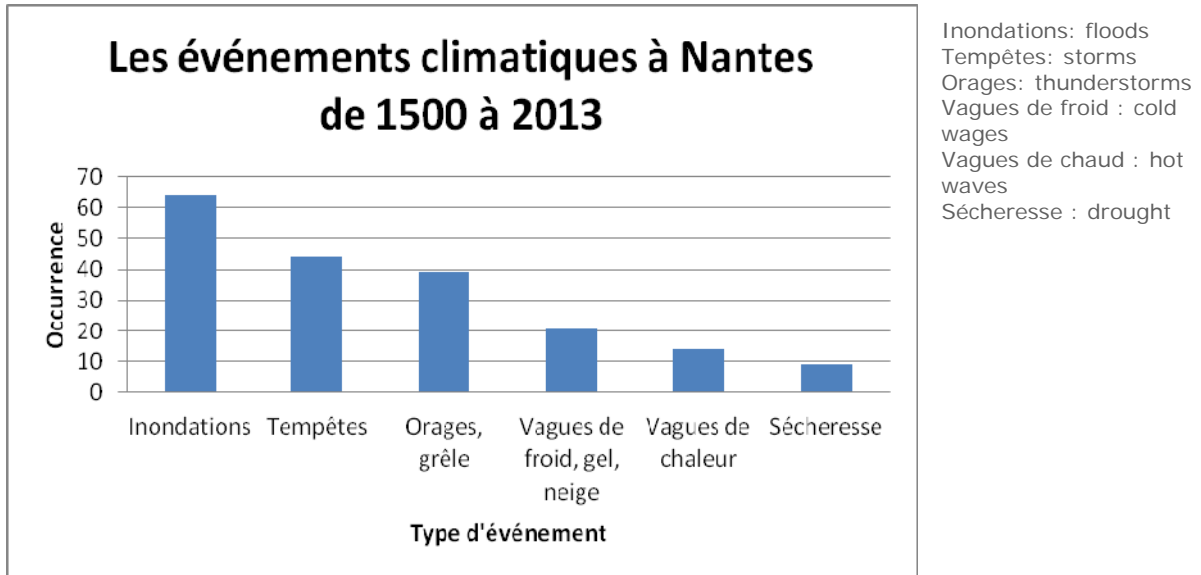




### Climate related events from the past

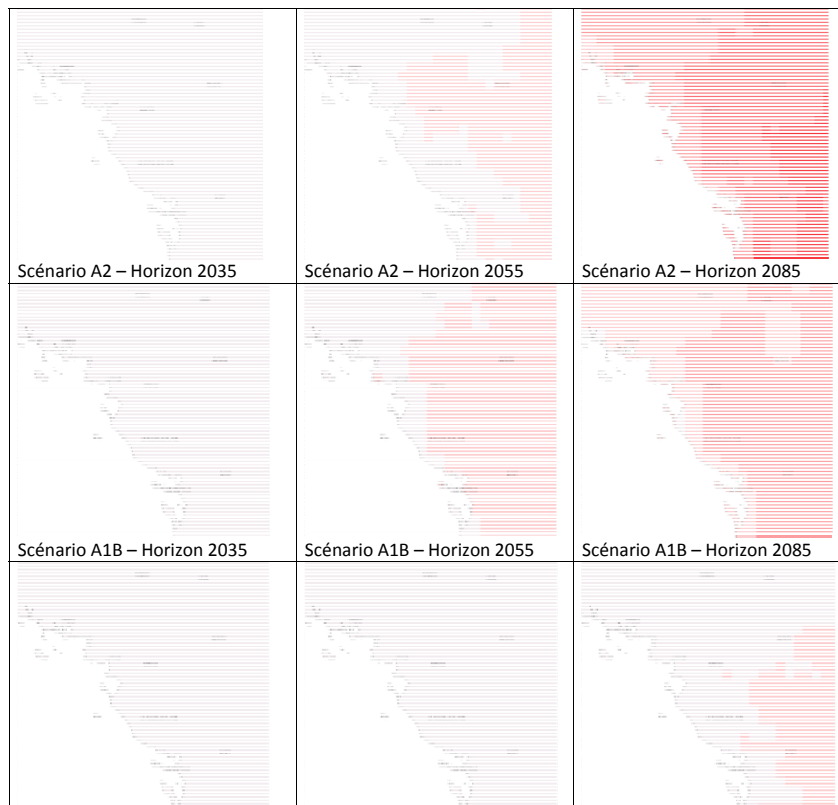
Nantes Métropole has analysed the climate related events from the past during a long term period from 1500 to 2013. Nantes Métropole studied different sources to well understand the past situation and identified the most important climate related events.



### Future climate related events

To have a better overview of future climate related events, Nantes Métropole used the national data base DRIAS (Météofrance, CNRM-GAME, IPSL, CERFACS) based on IPCC scenarios and French calculation models. Nantes Métropole obtains views at regional scale in function of climate indicators.

#### Example of result: heat waves



## Vulnerability assessment by domain

Due to the complexity of the adaption problems, Nantes Métropole assesses the metropolitan vulnerability in 7 seven domains:

- Biodiversity,
- Economic activities,
- Health,
- Energy and IT networks,
- Water cycle
- Buildings and transportation Infrastructures,
- Resilient city and organization

Some cross cutting analyse has been made to illustrate impacts:

### 1983 ICE STORM

#### 1983 Ice storm ID

- In exceptional July for heat and thunderstorms: during 9 days, 14 thunderstorms on Bouguenais city
- Violent gusts of wind
- Hailstones of more than 5 cms in diameter
- Strong thunderstorm from 4:05 pm till 6:10 pm with strong shower (19.6 mm)
- Very high temperature in the airport meteorological station before the ice storm (maximum 30.1°C at 2:30 pm) and falls in 19.6°C during the thunderstorm (at 6 pm)

	Biodiversity	Economic activities	Health	Energy and IT networks,	Water cycle	Buildings and transportation Infrastructures,	Resilient city and organization
1983 Ice storm		<p>Damages estimated at 22 millions of euros</p> <p>Impact on roofers employment : rise and fall of activities</p> <p>Not recognized state of natural disaster</p> <p>Fund of agricultural disaster used</p>			<p>Water and mud Streaming</p> <p>Floods of the ground</p>	<p>Damages on Roofs, windows and vehicles</p> <p>Damages estimated at 2 millions of euros on public buildings</p>	