

Call for papers - international symposium

Around the Aïgat of June 1875 in the South-West of France: how might understanding major floods of the past contribute to contemporary disaster risk management?

Université de Toulouse Jean Jaurès, Maison de la Recherche or Département de Géographie (bâtiment Olympe de Gouges), 5 Allées Antonio Machado 31058 Toulouse Cedex 9 - Laboratoires GEODE & LISST

Monday June 23 to Wednesday June 25, 2025

In the Garonne valley, and particularly in the Moyenne Garonne region, floods are called Aïgats, meaning “waters” (Deffontaines, 1932). Elsewhere, in the Roussillon region, for example, the term refers to both the downpour and the flood. The grand Aïgat de la Saint Jean took place from June 23 to 24, 1875, and affected the entire valley. This major event in the history of the Garonne is described by some authors as a “cataclysmic flood” (Lambert, 1982). It reached a height of 8.32 m at the Pont-Neuf scale in Toulouse, with more than 2 m of water in some of the city's streets, and 11.70 m at the Agen scale. The flood of June 1875 can also be seen as a “legacy of the old past” (Serret, 1874) which can be revisited today. In June 2025, 150 years will have passed since this flood of sinister memory, and the event will be the subject of several commemorations in Toulouse.

Toulousans were particularly hard hit by the flood: there were 208 people killed, 1,200 houses destroyed and 3 bridges washed away. One source reported: “(...) While 20,000 people were left homeless and relief supplies were being organized for this unfortunate population in the untouched districts, 1,200 soldiers were busy clearing away the rubble and extracting the corpses of those who had died in the disaster from the ruined heaps. (...) The St-Cyprien district was nothing but a necropolis. We walk on nothing but ruins. It's a distressing sight (...)” (extract from the newspaper *La Petite Gironde*, June 1875). Elsewhere in the valley, damage was widespread, both upstream (in the Pyrenees and foothills - a destroyed village and 81 victims in Verdun-sur-Ariège, for example) and downstream from Toulouse (Agen, Marmande, etc.) as far as Bègles in the Gironde department. The event of 1875 had a national impact, and the French President of the time, Mac-Mahon, famously exclaimed “Que d'eau, que d'eau!” as he toured the towns and villages of the South-West on June 26. The newspaper *La Dépêche* publishes a map of Toulouse after the flood, sold to raise money for the victims. Émile Zola, inspired by the flood, wrote a short story entitled “L'inondation”, set in a small commune

downstream from Toulouse, published in 1882. The Aïgat of June 1875 is a major flood in the history of the Garonne valley. It ranks alongside the events of 1435, 1712, 1770 and 1930. It was the biggest natural disaster to hit the Garonne valley for two centuries, with 500 deaths and several thousand homes destroyed.

Elsewhere in France, the history of rivers and streams is punctuated by other major floods. The year 1856 is infamous for the floods that swept through the Rhône, Loire, Garonne, Seine and Rhine valleys in late spring. In the Rhône valley, this 1856 inundation is considered by public authorities to be the “historic” 100-year flood. These remarkable hydrological events extended far beyond France, with some European countries such as Spain, Switzerland, Italy and Germany recording record rainfall levels during the same year, leading to heavy flooding. In France, all these events were summarized by major watershed in 2014 (Lang, Cœur, 2014). In other countries, remarkable floods such as the Mississippi flood of 1927, the most devastating in U.S. history, have been the subject of media coverage, giving rise to a “total cultural history” (Scott Parrish, 2017).

The flood of June 1875 on the Garonne is one of the manifestations of the end of the Little Ice Age, with a whole series of remarkable floods in France (floods of 1846-1856 and 1866 on the Loire basin, of 1840 and 1856 on the Rhône basin, of 1852 and 1876 on the Rhine basin...), which have not been exceeded for over 150 years. It illustrates the paradox of a period that is colder than today's, but visibly conducive to the occurrence of exceptional floods.

The “Autour de l'Aïgat de 1875 dans le Sud-Ouest de la France” conference, organized by the GEODE and LISST laboratories, is intended to commemorate the June 1875 flood 150 years on, while opening up the debate to other territories and other remarkable events, in order to enrich comparative studies and feedback. The symposium will provide an opportunity to take stock of the many geohistorical risk studies that have been carried out in Europe over the past few decades, with particular emphasis on the use of historical information in current risk management approaches. The organizers also intend to take a multi-disciplinary approach to the issue of major floods, open to both scientists and managers.

The symposium will focus on a number of themes:

1-What is known about the June 1875 flood in the Garonne watershed?

Floods on the Garonne have been the subject of numerous research studies (Lambert, 1982; SMEPAG, 1989; RGPSON, 1989). Some events have been particularly well researched, such as those of March 1930 (Boudou, 2015), December 1981 (DRAEA, 1982) and June 2013 (Sturma, Antoine, Becerra, Peltier, 2017). To date, there has been no synthesis of the June 1875 flood. What historic sources allow us to reconstruct this major event? What were the meteorological and hydrological conditions at the time? What is the current status of the maximum flow, which has been estimated at between five hundredths and one thousandths of a millennium? What impact did the June 1875 flood have on the press? How was it represented in iconography (engravings, paintings or photographs)? What were the economic and human consequences? What impact did the flood have on the valley's towns? What was its social and

political impact? Did the flood of June 1875 have consequences for the doctrine of protection solutions of the time, for land-use planning and for the implementation of diking projects? The answers to these questions will shed light on this major event in the history of the Garonne.

2-What remains of the remarkable floods today in the areas and societies affected?

These questions may also apply to other events on other rivers. Remarkable floods affect all regions and recur over time. Current flood risk management is based on the idea that the geohistory of risk, and the mobilization and dissemination of historical information, are conducive to the development of a risk culture among riverside populations. Using historical information on remarkable floods, through their course, their impacts and the way in which these catastrophic episodes were managed, is seen as a means of giving a concrete dimension to flooding and thus enabling local residents to perceive flooding as within the realm of the possible.

This raises the question of what remains of the remarkable floods of the past. What role do these floods play in the memory and culture of risk today? Are the traces of these rare events still identifiable in today's landscapes, and what are they (flood markers, commemorative plaques, remains of buildings, iconography, ritual or religious practices, etc.)? Should they be made more visible? Can we go so far as to consider that these various elements are likely to constitute a heritage (Metzger et al, 2019)?

3-Is it relevant to use past rare floods for current and future risk management, planning and urban development?

The use of historical information in current risk management approaches is based on the desire to learn from the past. The classic approach is to base flood risk prevention and management, such as the sizing of dykes, on the highest known floods, and at the very least on 100-year floods. What are the limitations of this type of approach? Isn't the heterogeneity of historical sources from one watershed to another a source of confusion in thinking and modeling? Shouldn't we also be basing ourselves on flood records rather than just on remarkable events? How far back in time should we go to find the remarkable reference flood, and on what criteria should we qualify it? Are the old sources used reliable, and have they been critically examined beforehand? Is it possible to reinterpret the remarkable floods of the past in the light of the diversity of contemporary territorial (urban, peri-urban, rural), social and environmental contexts? Faced with current changes in vulnerability and all the development work carried out on the river and watershed, would a remarkable flood of the past recur in the same way and have the same consequences? Doesn't relying on a remarkable flood propagate a fixed image of the potential course of a flood, at the risk of reducing the ability to react to a flood that might otherwise occur? In the context of climate change, is it still relevant to refer to the past? How can we understand the specific meteorological context

of the 19th century, with record floods that have yet to be surpassed? How can we integrate the uncertainty of the future and the risk that the scale of past floods will be exceeded?

4-Why and how should exceptional floods be commemorated?

Many major floods of the past are regularly commemorated through a proliferation of events (conferences, symposia, exhibitions, books, press articles, etc.). What are the aims and limits of these commemorations? What is their purpose? Do commemorations revive the memories of those who lived through the major event? Do they have a significant impact on the minds of those who did not experience the event? Is commemoration effective in maintaining a culture of risk awareness for events that took place a long time ago? What are the relevant mediation tools for making rare floods visible and mobilizing them to create and/or maintain a culture of risk awareness? The symposium organizers will be looking out for the diversity and originality of the commemorative experiences presented.

5-How do we live with exceptional flood risk today?

An exceptional flood, by definition, is one that exceeds the capacity of the affected society to react. It differs in intensity and course from frequent floods. Exceptional flooding therefore affects, on the one hand, local residents who are rarely flooded and for whom the risk may seem very abstract and, on the other, residents who are regularly flooded but who, through their experience, may have the impression of being able to control the event. How can we manage the threshold effect that makes the transition from “ordinary” flooding, which is relatively “controllable”, to exceptional flooding, the scale of which exceeds anything we could have imagined? How can crisis management departments prepare for this? How can this type of scenario, by its very nature unimaginable, be made plausible so that local residents can prepare for it? What types of environmental mediation tools are needed in this field?

6-How to teach natural hazards based on historical disasters?

The teaching of natural hazards in primary and secondary schools takes the form of thematic sessions on risks, aimed at understanding the production of risks and vulnerability, as well as major risk education, designed to train citizens capable of reacting in the event of a threat. To what extent can this two-pronged approach to education be based on remarkable floods of the past? How can high-intensity disasters be used in risk education? In order to be attractive, textbooks give priority to the most recent disasters, but the study of climate change in history-geography-geopolitics specialization courses requires a historical perspective that can lead to the consideration of past disasters.

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Jean-Marc Antoine (Université Toulouse Jean Jaurès, GEODE)

Bertrand Desailly (Université Toulouse Jean Jaurès, GEODE)

Philippe Dugot (Université Toulouse Jean Jaurès, LISST)

Michel Lang (INRAE Lyon)

Anne Peltier (Université Toulouse Jean Jaurès, GEODE)

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Timetable :

Circulation of the call for papers -September 2024

Deadline for paper proposals - December 20, 2024

Response to accepted papers - March 3, 2025

Conference program - April 30, 2025

Papers due - September 1, 2025

Proposals can be submitted in English, French or Spanish on the scienceconf.org website:
<https://aigat1875.sciencesconf.org>

Files submitted must be editable (word, libreoffice), excluding pdf format.

Deadline for submissions: December 20, 2024.

Authors will be informed of the Scientific Committee's decision by March 3, 2025. Accepted abstracts and the program will be published on the dedicated symposium website and sent to the selected authors.

The proceedings of the symposium will be published in two forms: a selection of articles will be published in the LHB Hydrosience Journal (<https://www.tandfonline.com/journals/tlhb21/about-this-journal>) and the symposium proceedings will be published by Editions PUM, in the Paysage & Environnement collection (<https://pum.univ-tlse2.fr>).

The symposium will take place at Toulouse Jean Jaurès University on June 23 and 24, 2025. Papers may be presented in French, English or Spanish, but without simultaneous translation. The registration fee for the two-day conference is 80 euros (reduced rate 60 euros). An optional excursion is planned for June 25 (participation fee 50 euros).

For further information: philippe.valette@univ-tlse2.fr