

## Case Study

## Last Resorts

## How Climate Imaginaries Come to Matter

As the planet burns and a sense of stable futurity crumbles away, climate imaginaries rush in to fill the gap. Whether optimistic or apocalyptic, technocratic or personal, these prevailing sketches of the future act upon the present to direct resources, shape policy and steer the preparation for anticipated scenarios.

Not everyone is a climate scientist, but everyone is a climate subject with a stake in the planet's survival. Through insurance schemes and adaptation programmes, climate risk and forecasting are transformed into tangible and immediate economic realities for many on the Iberian Peninsula, shaping homes and livelihoods. The temporal register of these schemes is typically the normative time of economics and finance, which has to encounter the messiness of real catastrophe.

This working group will explore the various imaginaries that populate prevailing ideas of climate futures, looking into the politics of preparedness. How are ideas about climate futures produced and circulated, and which versions of the future are being prepared for? Who is included in them, and who isn't? And what temporal registers are suited to the task of anticipating and equitably preparing for climate futures?

[Introductory video →](#)**Pulso:** Jacob Bolton and Gary Zhexi Zhang**Facilitating entities:** BC3 Basque Centre for Climate Change**In collaboration with:** National Office of Foresight and Strategy

## 02 Case Study conceptualization

From wildfires to floods to energy grid blackouts, the Iberian Peninsula is seeing more and more climate-related catastrophes. Through insurance schemes, preparedness protocols and post-disaster restoration masterplans, both public and private actors seek to secure the present against a future undermined by extreme weather events. But as each year breaks new records, the mounting pile of cases to be studied and lessons to be learned underscore the ways in which the climate crisis is not a future scenario, but a present reality we are a long way from catching up to.

*Last Resorts* looks at the imaginaries, politics and infrastructures of climate resilience in the aftermath of these devastating events, tracing their interdependencies and ramifications across the region, within Europe and through the global system.

One example is the DANA floods of 2024. Reports following the flooding found that more than one million homes in Spain are built in areas classified as medium-risk zones for river or sea flooding – about 1 in 20 houses, many of which are on the Mediterranean coast. The floods led to the biggest payout in the Spanish government's flagship climate insurance scheme's history – more than the ten costliest events combined – reducing the scheme's financial reserves by about a third.

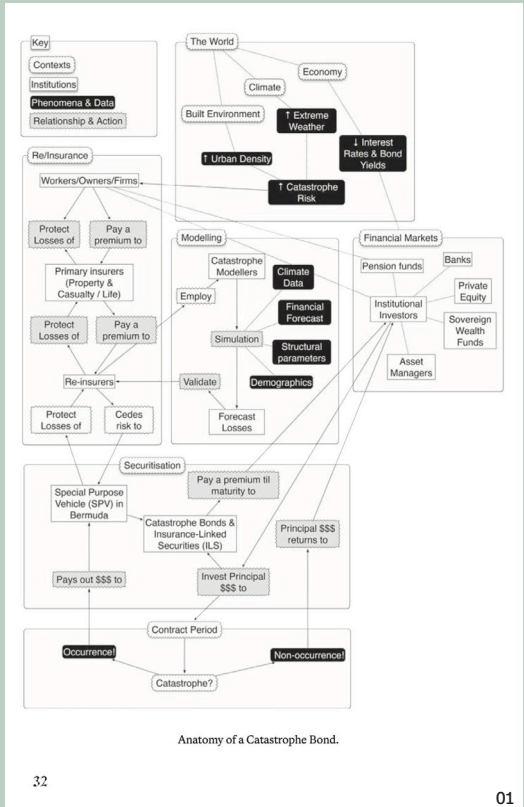
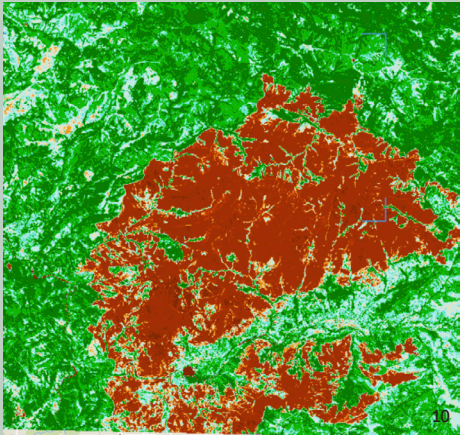
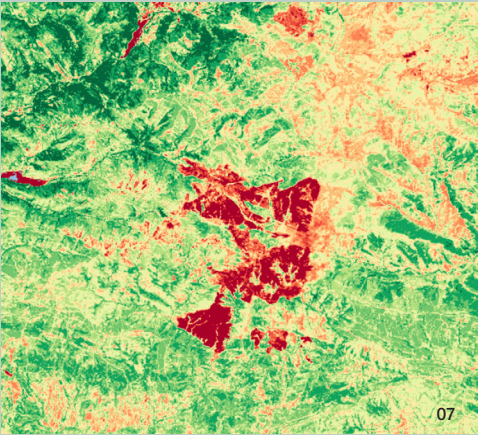
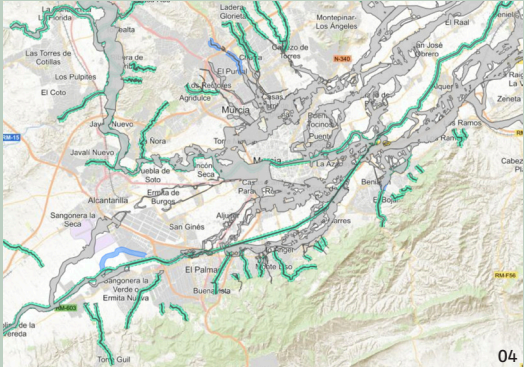
While the Spanish justice system continues to investigate those responsible for the questionable management of the disaster, and the tension between regional and national governing organisms increase, the reconstruction work continues without clear planning strategies capable of addressing a proper scenario planning that integrates the changing climate scenarios to come.

Now, in the wake of a devastating wave of fires that burned a combined area ten times the size of the municipality of Madrid, similar questions are arising. What futures are being prepared for, and for whom? By what tools and metrics do we measure a crisis? Who shapes the supply chain, and what are their expectations and constraints? What are we willing to change, to construct, to give and to give up? Whose speculations matter? Are there last resorts? The case study will consider these questions and explore comparative cases in order to grapple with the multi-temporal and multi-scalar contours of the anticipation, governance and aftermath of catastrophic events.

This case study will examine the politics of preparedness as an ongoing material, technical and imaginary production. It will involve scientific and political institutions, as well as scholars and experts in the sociology of catastrophe, climate communication and insurance. Outputs will be oriented towards mediating between different actors involved in climate anticipation by bringing together wide-ranging forms of research in order to explore heterogeneous temporalities of climate mitigation and catastrophe anticipation, in all the ways in which they do—and do not—form a coherence.

To this end, the case study will aim to integrate a mixed skillset including geospatial analysis and mapping, data visualisation, social science methods, simulation, as well as interdisciplinary research, writing and design.





01. Diagram of a catastrophe bond instrument, *Catastrophe Time!*, Gary Zhexi Zhang  
02. Flooded Citrus and Persimmon Orchards, Revista Campo  
03. National Flood Risk Map, Ebro Delta, Sistema Nacional de Cartografía de Zonas Inundables (SNCZI)  
04. National Flood Risk Map: Murcia, Sistema Nacional de Cartografía de Zonas Inundables (SNCZI)

05. Solar Farm, Aragon, Google Earth, Imagery Landsat / Copernicus, Maxar Technologies, Map Data © 2025  
06. Copernicus Sentinel-2, 26 August, near Tremor de Arriba – Natural Colour  
07. Copernicus Sentinel-2, 26 August, near Tremor de Arriba – Normalised Difference Vegetation Index  
08. Solar Farm and Substation, Aragon, Google Earth, Imagery Landsat / Copernicus, Maxar Technologies, Map Data © 2025

09. Copernicus Sentinel-2, 23 August 2025, O Barco and surrounding scorched hills  
10. Copernicus Sentinel-2 Imagery for 23 August 2025, using Standardized Burn Index Infrared combination bands. Town of O Barco is in the valley at towards the bottom



## 03 Key research approaches

### Insurers of Last Resort

- Spain's Consorcio de Compensación de Seguros (CCS) is a public-private insurance scheme that acts as a backstop for natural disasters. Formed after the civil war in 1941 to cover widespread losses, it collects levies on private insurance products and puts them into a pool that can be tapped into in case of extraordinary events – an arrangement that is lauded as world-leading. CCS, however, is an instrument primarily for homeowners: while private renters can take out their own insurance policies, few do, and they are not covered by their landlord's buildings insurance. How does this scheme distribute risk? Who is left behind? And what kinds of disaster-adjacent economies does this arrangement allow for?

### Limits of Insurance

- Recent years have seen extraordinary events start to look a lot more ordinary, testing the limits of the CCS insurance scheme. After DANA's impact on CSS financial reserves, in the wake of more extreme weather, the contributions (which are currently set very low – about €14 a year for a home and €2 for car insurance) may need to change to make the scheme more resilient. This could lead to resentments over who is subsidising who: will people living inland resent subsidising a coast that is increasingly becoming a playground for tourists and the wealthy? And more importantly, can payments keep up with the rate of extreme weather events before the reserves run out? What happens afterwards?

### Ordinary Wildfires

- Wildfire property damages are not covered by the scheme, unless the fire is caused by an 'extraordinary event' – namely, a volcanic eruption. After a summer in which wildfires raged across the peninsula, the scheme is under pressure to also include fire damage, which is currently excluded from coverage. This could see the CCS become a key point of mobilisation around climate preparedness, bringing in actors and campaigners who are not usually engaged in climate politics. How might this change the landscape of climate preparedness and contestation?

### No Such Thing as a Natural Disaster

- After a disaster, towns and cities are rarely built back the same. Hurricane Katrina, for example, was a force of gentrification: in the years after the disaster property developers swooped on waterfront land in New Orleans, building new luxury apartments and pricing out working class residents. In other disasters, there is the question of whether to build back at all, in places that are exposed to particularly extreme conditions. After the DANA floods of 2024 and the fires of Summer 2025, there is every risk that we might see similar patterns and similar questions. How can post-disaster economies avoid

### Scenario Planning

- Climate preparations, forecasts and interventions all rely on a set of future emissions scenarios, known as RCPs (Representative Concentration Pathways). The future looks very different depending on which scenario is used as a baseline. RCP1.9, for example, assumes global heating will be kept below 1.5 °C, the target of the Paris agreement, which the planet is already overshooting. RCP8.5, on the other hand, assumes that GhG concentrations will continue to rise throughout the century. These scenarios are not neutral, and subtle differences produce vastly different results in forecasts and models. How is climate (in)action rendered technical through scenario planning? What politics and power dynamics do these narratives mask or advance?

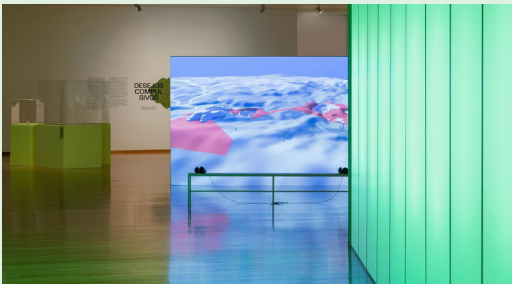
## 04 Pulsos



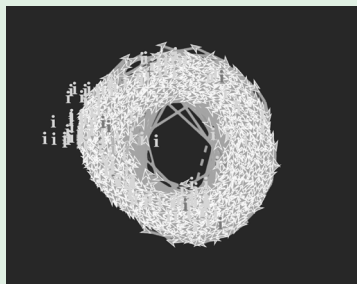
### Jacob Bolton

→ is a researcher and writer interested in the political economy of logistics and climate breakdown. He is a PhD Candidate at the London School of Economics, looking into forms of speculation around melting sea ice in the Arctic, particularly the opening up of new sea lanes. He runs the artist-research project Liquid Time with Miriam Matthiessen. He also runs the Abandoned Seafarer Map, with friends. He holds an MA from the Centre for Research Architecture and has taught at the Royal College of Art, London, and the Critical Practice Studio, Palestine.

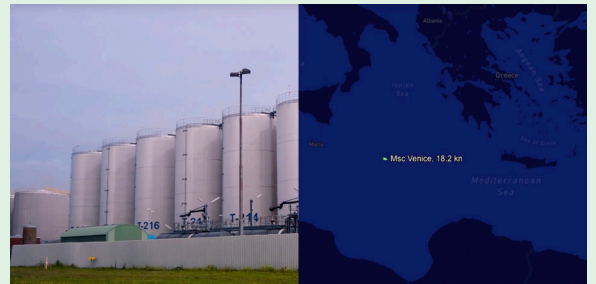
[jacobbolton.info](http://jacobbolton.info) →



Godofredo Enes Pereira, Jacob Bolton, Mingxin Li, Tiago Patatas, Grupo de Investigação Territorial, *From Montanha Invertida*, Exhibition view: Desejos Compulsivos, Galeria Municipal de Porto, 2022.



Jacob Bolton, *From Supply Nets: The Logistics of Seafarer Abandonment*, 2022.



Jacob Bolton and Miriam Matthiessen, Still from *Methanol Blue, Liquid Time*, for Busan Sea Arts Festival, 2023.



### Gary Zhexi Zhang

→ is an artist and writer whose work explores systemic connections between cosmology, technology, and the economy. He recently edited *Catastrophe Time!* (Strange Attractor Press, 2023), a collection of essays, fictions and interviews about finance and time, and is working on a new book about technoculture in a multipolar world. He has held positions as Lecturer in Critical Studies at Goldsmiths, University of London, Adjunct Lecturer at Parsons School of Design, Lead Researcher at the British Council, amongst others and publishes widely on topics related to art, technology, economy and China.

[zhexi.info](http://zhexi.info) →



Gary Zhexi Zhang and *Waste Paper Opera, Dead Cat Bounce*, Notts Contemporary, 2024



Gary Zhexi Zhang, still from *Ocean Briefings*, 2024



Gary Zhexi Zhang, still from *The Tourist*, 2023

## 05 Facilitating entities

### BC3 Basque Centre for Climate Change

→ The BC3 is a research centre on the causes and consequences of climate change. Led by one of the most recognized scientists in the Climate Change field -Prof. Maria José Sanz, they produce multidisciplinary knowledge to support decision making towards sustainable development at the international level. With a multidisciplinary team, connected to the main scientific institutions, networks and socio-economic

agents, for a decade, their contribution to research of climate change and to the science-policy interface puts them in a unique position to offer knowledge, tools, new methodologies and cross-cutting proposals, that they lead towards action in a collaborative framework with stakeholders, to design and help implement policies aimed at sustainable development.

[bc3research.org](https://bc3research.org) →

### In collaboration with:

#### National Office of Foresight and Strategy

→ The National Office of Foresight and Strategy is a unit of the Presidency of the Government of Spain responsible for analysing the challenges and opportunities that

Spain will encounter in the coming decades and helping the country prepare for them.

[futuros.gob.es](https://futuros.gob.es) →

## 06 Guest experts Some of the voices informing this case study, among others, are:



### Aslak Aamot Helm

→ works on building alliances, experiments, and organizations across art, science, advanced technologies, and industry. He is co-founder of the transdisciplinary studio Diakron and Primer, a platform for artistic and organizational development formerly housed in the biotech company Aquaporin. He has recently completed a postdoctoral research project with Medical Museion (DK) and Serpentine Galleries (UK) that has led to a recent body of work around the concepts under-determination and uncertainty.



### Mercedes García Pérez

→ is the Deputy Director for Global Issues and Head of Division for Migration and Human Security at the European External Action Service (EEAS). Her career of more than 20 years in EU Foreign and Security Policy includes serving at the Delegation of the European Union to the USA in Washington DC, where she was the Head of Global Issues and Innovation, representing the EU in the Energy, Green Deal and Global Health areas. She has served in other management positions in the EEAS including as Head of Division for Human Rights and as Head of Operations in the EU Civilian Headquarters, where she oversaw the conduct of ten EU Civilian Operations in three continents.



### Tony Agotha

→ is a Dutch diplomat who is currently Ambassador-at-large/EU Special Envoy for Climate and Environment (EEAS, MD GLOBAL). Previously he worked in the cabinets of First/Executive Vice President of the European Commission Frans Timmermans as senior diplomatic adviser contributing to the European Green Deal. Tony Agotha joined the Netherlands Diplomatic Service in 1996 and held numerous diplomatic posts at HQ and in the EU. He studied Public Administration & Political Science at the University of Twente (1995) and wrote his Masters' thesis at the University of North Carolina at Chapel Hill (NC) as a visiting scholar on the Reagan Defense Budget.



## 07 Expanded study materials

visit [are.na](https://are.na) Last Restarts →

- Zeke Hausfather, 'Explainer: The high-emissions 'RCP8.5' global warming scenario' in *Carbon Brief* (Aug 22, 2019). - [link](#)
- Brett Christophers, 'The Allusive Market: Insurance of Food Risk in Neoliberal Britain' in *Economy and Society* 48 (Feb 27, 2019). - [link](#)
- Robert Muir-Wood, *The Cure for Catastrophe: How We Can Stop Manufacturing Natural Disasters* (Jun 9, 2026).
- *Second Sea* ([website](#)).
- Christine Ro, 'Spanish Catastrophe Insurance Is World-Leading. How Will It Deal With Escalating Climate Change?' in *Forbes* (Jul 22, 2025). - [link](#)
- Rebecca Solnit, *A Paradise Built in Hell*, (Viking Press, 2010).
- Neil Smith, 'There's No Such Thing as a Natural Disaster' in *Items* SSRC (Jun 11, 2006). - [link](#)
- *New maps double flood risks of Spanish homes in Water News Europe* (Jan 01, 2025). - [link](#)
- Beki McElvain, 'Trying to Reason with Hurricane Season' in *The BREAK—DOWN* (May 7, 2025). - [link](#)
- Michel Aglietta & Étienne Espagne, Climate and Finance Systemic Risks, more than an Analogy? The Climate Fragility Hypothesis in *CEPII Working Paper*, No 10 (April, 2016). - [link](#)
- Rebecca Elliott *Underwater: Loss, Flood Insurance, and the Moral Economy of Climate Change in the United States* (Columbia University Press, 2021)

"In other words, flood hazards, and decisions regarding what to do about them, do not have an inherent economic character that simply needs to be revealed and acted upon. Rather, hazards and decision-making have to be rendered economic, formatted in ways that make things calculable and people calculative. Insurance transforms and defines things as economic problems."
- Kasia Paprocki *Threatening Dystopias. The Global Politics of Climate Change Adaptation in Bangladesh* (Cornell University Press 2021)

"Uncertainty is not a static condition. It is mutable and negotiable. It changes as it traverses different research programs and policy dialogues. It is often both the cause and the result of contestation. When confronted with the existential threat of ecological collapse, how do the politics of uncertainty shape decisions over where and when there can be no hope and no possibility of return? I suggest that uncertainty can be practiced in both the presence and the absence of information. The idea of uncertainty does work when it comes to planning how to adapt to climate change. The question examined in this and the following chapter is: What work does it do, and for whom?"
- Gary Zhexi Zhang *Catastrophe Time!* (Strange Attractor Press, 2023) [link](#)

"Risk is both a threat and a resource; there is no profit to be made without it. For its part, money is an ambivalent messenger: a coastal Republican who doesn't believe in a warming planet still feels deeply attached to the value of his house and his pension, should insurance premiums start to rise. Meanwhile, by anchoring actuarial abstractions in underlying meteorological data, catastrophe modellers serve as fact-brokers to the market, mediating scientific knowledge into the kind of values that investors can understand: financial exposures and dollar losses. While they are speculative science fictions par excellence, catastrophe models wield tremendous epistemic power over insurance stakeholders, with the potential to influence homeowners, policymakers and builders to shape the overall geography of risk."