



**MINISTÈRE
DE LA TRANSITION
ÉCOLOGIQUE
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DES TERRITOIRES**

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THE STATUS OF THE FOURTH GLOBAL BLEACHING EVENT IN THE FRENCH OVERSEAS TERRITORIES

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The coral reefs of the French overseas territories

- **58 000 km² of coral reefs, 10% of the global coral reef area, (4th largest coral reef area) in 3 oceans (Atlantic, Indian, Pacific).**
- **11 overseas territories with different constitutional status** (different degrees of autonomy).
- **90% of these coral reefs are found in New Caledonia and French Polynesia.**
- Important responsibility and commitment to **protect coral reefs through national policies and regional cooperation.**



The French Coral Reefs Initiative

The French Coral Reefs Initiative (Ifrecor) was created in **2000** based on the ICRI model.

Ifrecor :

- Promotes the **protection and sustainable management** of coral reefs and associated ecosystems in the overseas territories.
- **Gathers all stakeholders** at the national level and within each territory.
- Is **co-chaired by the ministries** in charge of the **environment** and the **overseas territories**.

Ifrecor mainly acts on **producing/supporting decision making tools and knowledge** (red lists, methodological guidance, maps, etc.).

Ifrecor operates the **Coral Reef Monitoring Network** (key activity).

- Since 2016, it is **bound by law** to **assess the health status of coral reefs** and associated ecosystems **every five years**.
- **Monitoring of bleaching events** is coordinated by the Coral Reef Monitoring Network.



Bleaching monitoring methods

- In the French overseas territories, **coral reefs monitoring campaigns are led by different structures** (universities, State agencies, private companies, etc.).
- In 2019, Ifrecor published a guide to **improve the monitoring of bleaching events** to support managers and **define standardized operational monitoring protocols**.
- The guide develops 3 methods (depending on the available human & financial resources):
 1. **Opportunistic data collection**
 2. **Visual estimation**
 3. **Photo-quadrats**

The guide sets several **priorities**:

- **Post-bleaching monitoring** to assess **mortality**;
- Use **coral cover & percentage of affected cover** as basic descriptors;
- Focus on **“historical”** or **“sentinel”** sites (GCRMN, MPA monitoring, etc.);
- Promote **photo-quadrats** analysis wherever possible.

It is now mandatory to follow the guide and its methods to unlock public funding (50 000 € every year) for bleaching monitoring.



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Current Status: in the Caribbean

The first signs of coral bleaching appeared in late August 2023 and extended to the whole coral community in September 2023. First signs of recovery were reported in late November 2023, after 10 weeks of alert level 2. Some corals were still bleached in April 2024 (very unusual).

GUADELOUPE

The situation is catastrophic:

- On the reef flat: **80% of coral death**.
- On the reef front: **10% of coral death with still 30 to 40% of bleached coral** (April 2024).

Claude BOUCHON, personal communication, 12/04/2024

MARTINIQUE

Two campaigns were launched: during the bleaching peak, and in February to assess the impact of the episode.

- **81% of the coral cover was impacted** at the peak of the episode.
- **34% of the coral cover was lost** after the bleaching.
- In February, **4 common coral species were still strongly affected** (>50% bleaching prevalence).

SAINT-MARTIN & SAINT-BARTHELEMY

No extensive campaigns were launched in those territories.

Yet a hopeful note:

In Saint-Barthelemy, there was **no sign of bleaching on the remarkable colonies of Acropora in the bays of Grand cul de sac and Pointe Milou**.

Sébastien GREAU, pers. com. 12/2023

Current Status: in the Western Indian Ocean

A major bleaching event is currently ongoing in the Indian Ocean, affecting Mayotte and the Scattered Islands.

REUNION

Bleaching is not widespread, only certain zones of the reef flat are affected.

However, a high rate of coral diseases has been reported (could contribute to increase vulnerability to bleaching).

MAYOTTE

Bleaching monitoring campaign has started with **100 surveys stations** all around the island (6-10 April).

- **35% of white or pale corals**, less than 1% mortality.
- The numbers are **similar to the 2016 bleaching event**.
- **BUT** this bleaching event spreads **deeper than previously** (at least 25m) and the campaign was 1 week before the peak. **There is a high risk of mortality.**

SCATTERED ISLANDS

The bleaching is important in:

- **Geyser Island** (38% of bleached colonies);
- **Glorieuses** (68%);
- **Juan de Nova** (~50%);
- **Tromelin** (currently processing).

There is **no bleaching in Europa**, the cooler water (<30°C) could explain the difference.

Current Status: in the Pacific Ocean

The **monitoring campaigns** are **ongoing**, or to be launched, in the French territories of the Pacific ocean. We only have first alerts and trends but no results to share at this point.

NEW CALEDONIA

There was an **important bleaching event in 2023** (Loyauté Islands).

In 2024, **massive bleaching** was reported on the **east coast**.

The **lagoon or the barrier reef** seems to be **less affected** at the moment.

Sandrine JOB, pers. com., 2024

FRENCH POLYNESIA

An **important bleaching** was reported in the **Tuamotu Islands**. The **Society Islands** are **less impacted**.

There are **large variations between the different islands**. A monitoring campaign is about to be launched.

Laetitia HEDOUIN, pers. com., 2024

WALLIS AND FUTUNA

The information are currently not available and will be gathered soon.



Additional resources (hyperlinks)

- [Guide for the environmental monitoring of coral bleaching episodes and the assessment of their impact on coral populations \(FR only\)](#)
- [Synthesis on the 2023 bleaching event in the French West Indies \(FR only\)](#)
- [Coral Reefs Action Plan \(FR only\)](#)
- [Health Status of Coral Reefs, Seagrass Beds, and Mangroves of the French Overseas Territories in 2020](#)
- [France's member page on ICRI's website](#)
- [Ifrecor's website \(FR only\)](#)



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