



Liberté Égalité Fraternité

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.



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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.



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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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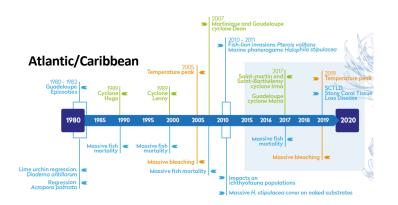


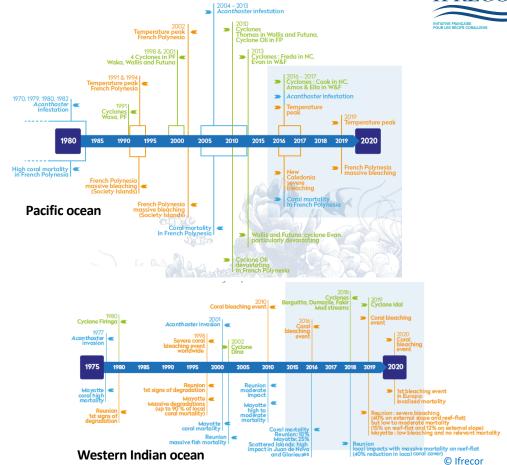


Past bleaching events

We have long-term data series on the past bleaching events (and other crisis) in the three oceans.

The global bleaching events appear clearly in our results.





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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).

MARTINIQUE SAINT-MARTIN & SAINT-BARTHELEMY **GUADELOUPE** Two campaigns were launched: during the No extensive campaigns were launched in The situation is catastrophic: bleaching peak, and in February to assess the those territories. impact of the episode. > On the reef flat: 80% of coral death. > 81% of the coral cover was impacted at > On the reef front: 10% of coral death with Yet a hopeful note: the peak of the episode. still 30 to 40% of bleached coral (April In Saint-Barthelemy, there was no sign of 2024). > 34% of the coral cover was lost after the bleaching on the remarkable colonies of bleaching. Claude BOUCHON, personal communication, Acropora in the bays of Grand cul de sac and 12/04/2024 Pointe Milou. In February, 4 common coral species were still strongly affected (>50% bleaching Sébastien GREAUX, pers. com. 12/2023 prevalence).

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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 ressources (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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