GCRMN
Global Coral Reef Monitoring Network

ICRI
International Coral Reef Initiative

Australian Government

Australian Institute of Marine Science

Australian Government
Department of Foreign Affairs and Trade

Gouvernement Princier
Principauté de Monaco

Government Offices of Sweden
Ministry for Foreign Affairs

Prince Albert II of Monaco Foundation

UN environment programme
50 1972-2022

Status of Coral Reefs of the World: 2020

Edited by: David Souter, Serge Planes, Jérémy Wicquart, Murray Logan, David Obura and Francis Staub

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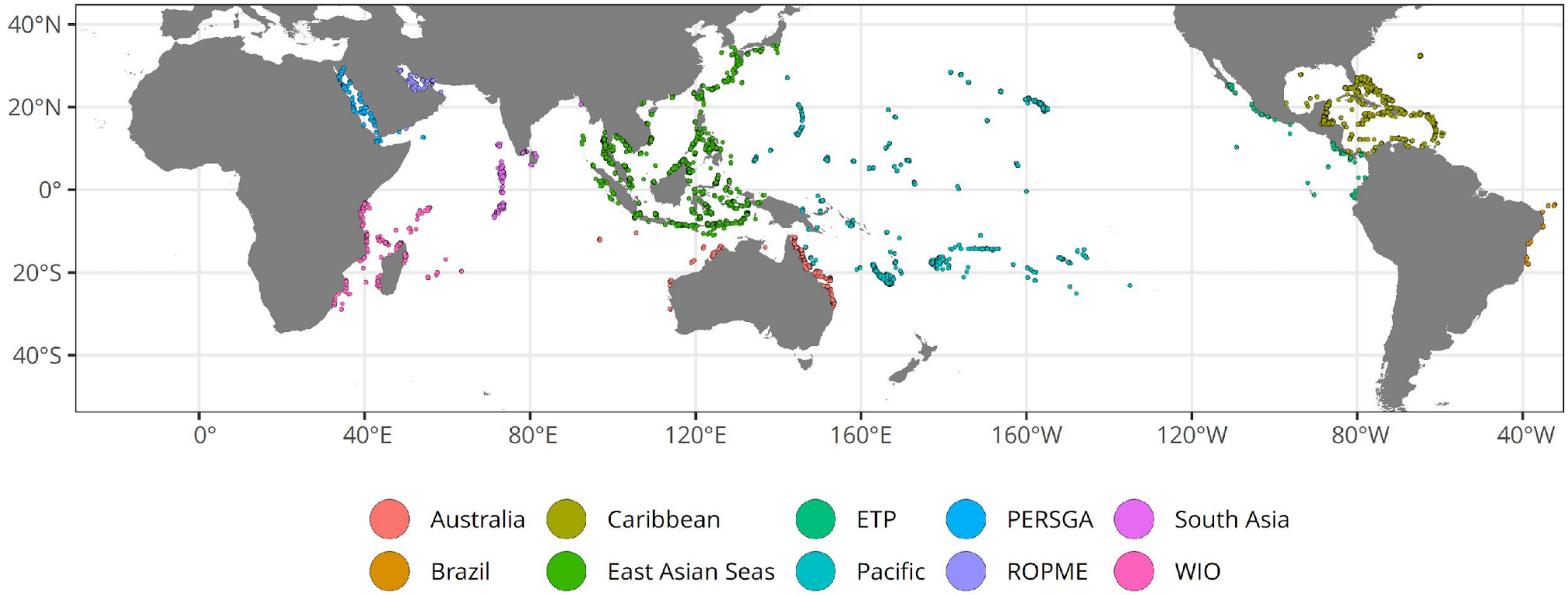

- **~2 million observations**
- **Collected by >300 Scientists**
- **Collected over 41 years (1978 – 2019)**
- **From 12,000 sites**
- **From 73 countries**

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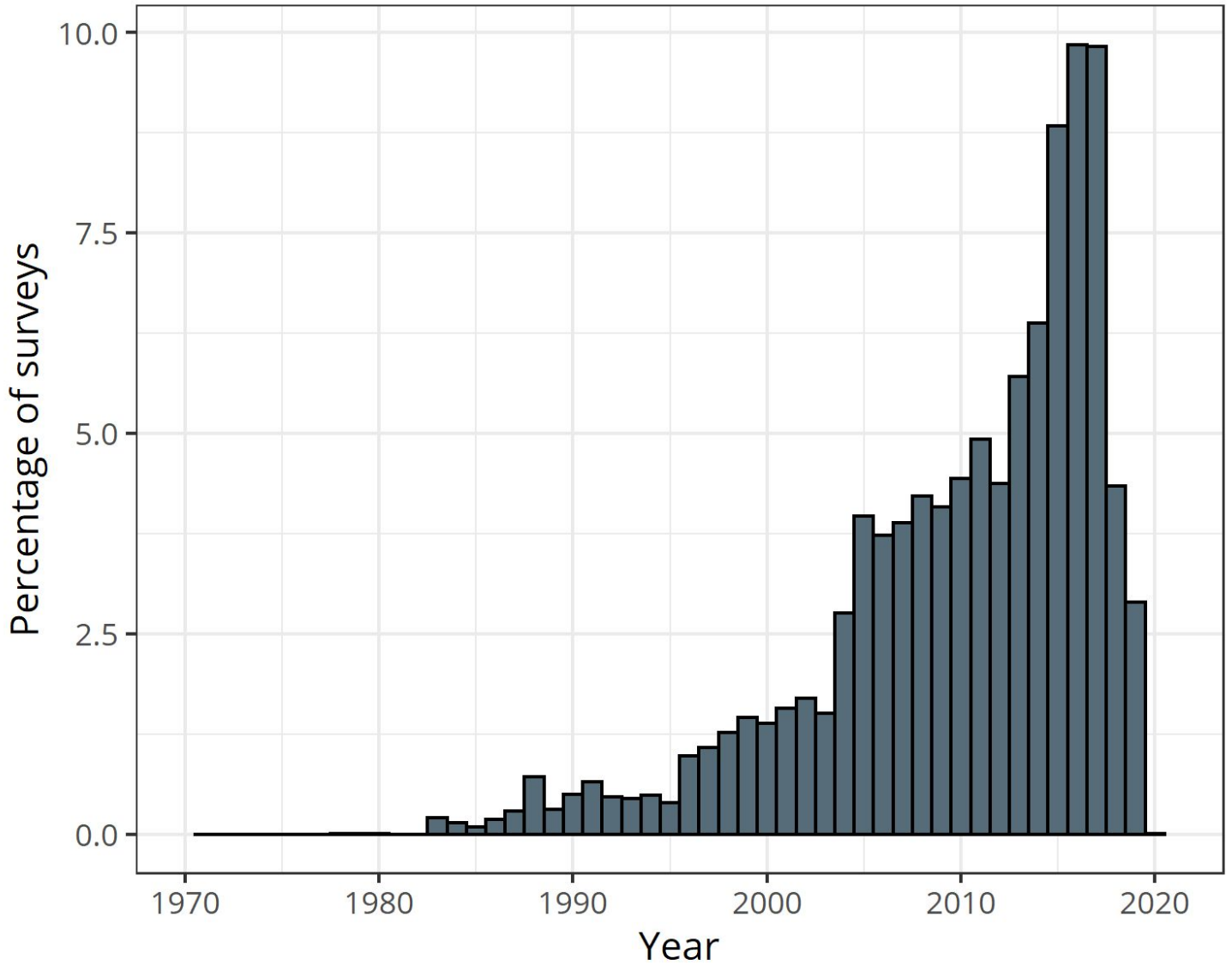

- Pre-1998 - global average coral cover is high and stable
- Uncertainty high
- 1998 - first mass coral bleaching event
  - Number of surveys increased dramatically and so did confidence in the estimate
  - Killed 8% of the world's corals
- 2002-2009 – Coral cover recovered to pre-1998 levels
- 2009-2018 – 14% loss of the world's corals
- 2019 – first sign of recovery

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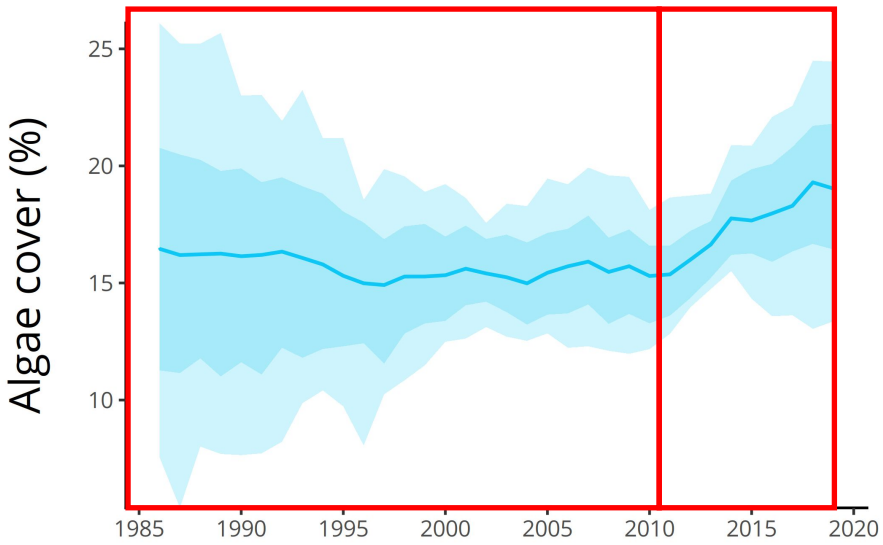
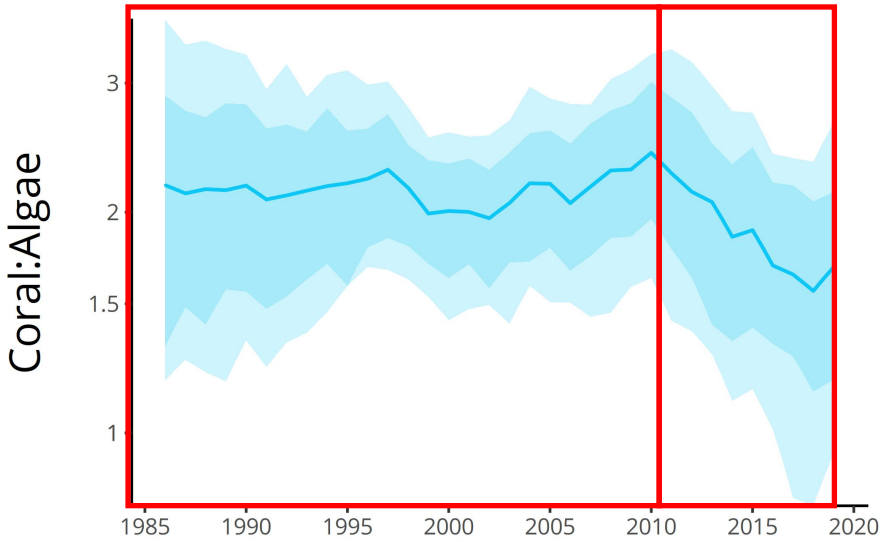


Estimated global average cover of algae



Ratio of estimated global average cover of hard coral to algae

- **Inverse relationship with hard coral cover**
- **Pre-2011 - cover of algae is low and stable**
- **20% more algae on the world's reefs during the last decade**

- **Historically, there has been > 2 times more coral than algae on the world's reefs**
- **With the decline in the amount of coral and the increase in the amount of algae, this has dropped to about 1.5**

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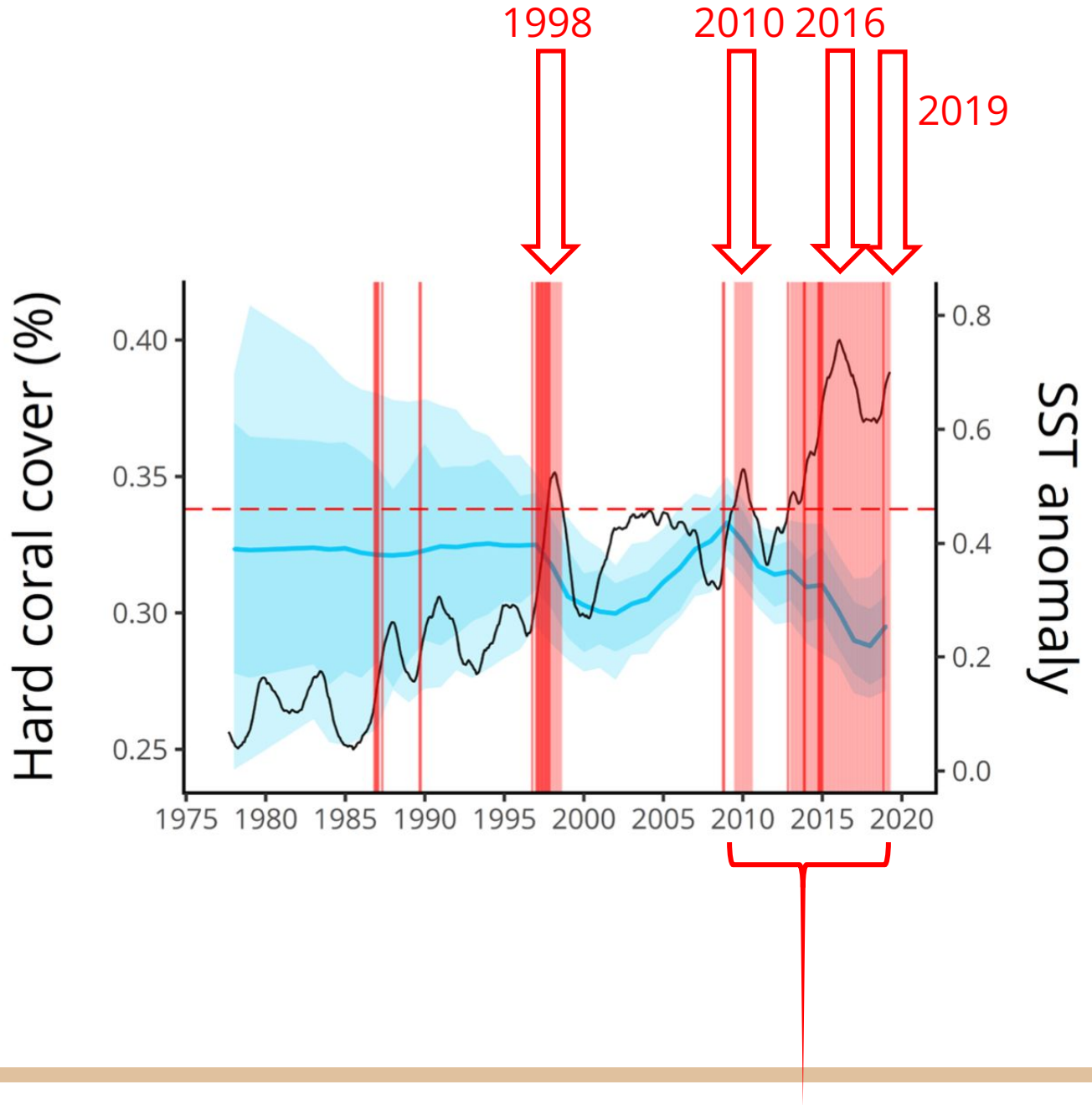

- **Very strong association between global hard coral cover and mean global SST anomaly**
  - **Rapid increases in the global SST anomaly (dark red)**
  - **Periods of sustained SST anomalies (light red)**
- **All three global bleaching events have coincided with periods of rapid increase in SST anomaly**
- **Sustained high SST anomaly during the last decade conincides with progressive decline in coral cover**
- **Direct impact of climate change**
- **2019 – evidence of adaptation?**

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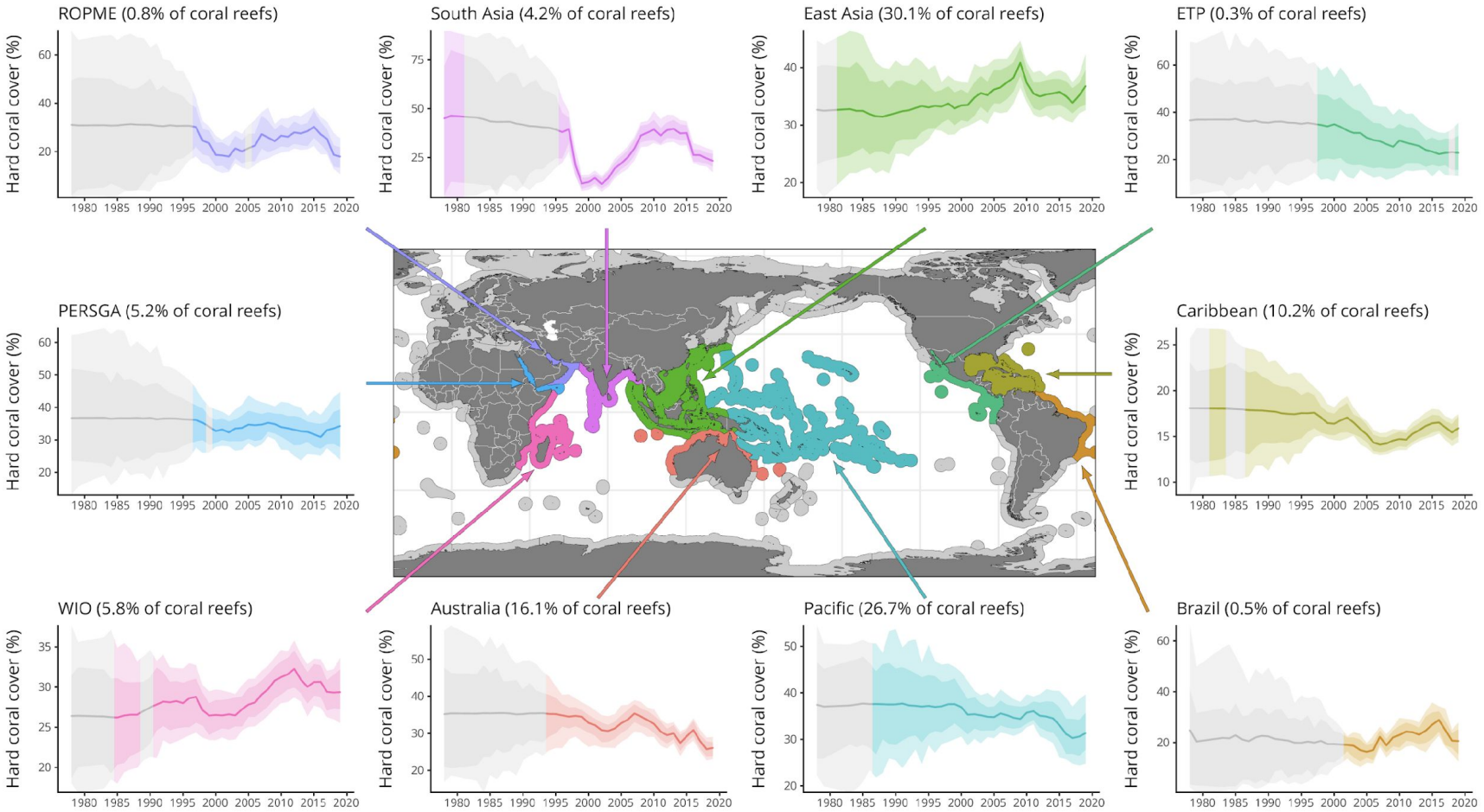

- **Variation in magnitude of change**
- **Similarities in pattern (early relative stability, 1998, declines in the last decade)**

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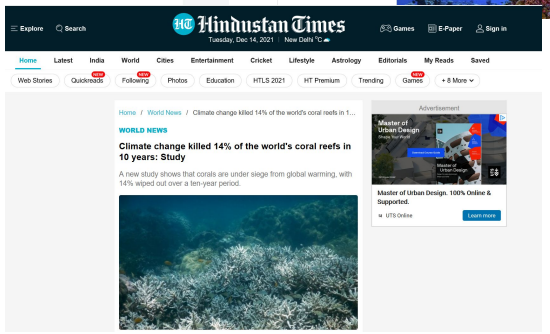
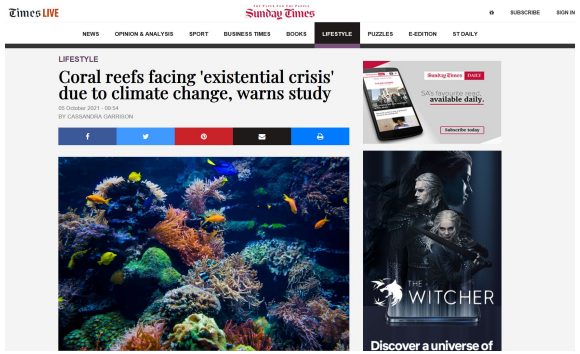
Media Uptake

- > 4000 downloads
- 592 media articles
- Published in 480 outlets
- 62 countries
- 18 languages
- Reaching 2.5 billion people
- New York Times, The Washington Post, The Times, The Guardian, Le Monde, Al Jazeera, and the BBC.





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GCRMN Animations

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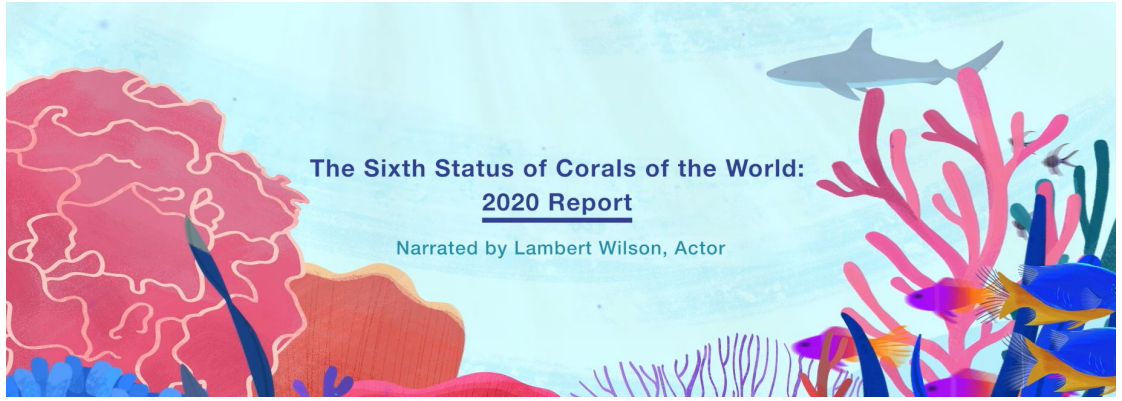
- **To support the launch of the Sixth GCRMN Status of Coral Reefs of the World: 2020 report, 8 animations have been produced:**
  1. **Full-length Animation (English)**
- **Short Animations (60 seconds):**
  1. **Antoinette Taus (English)**
  2. **Carolina Pereira (Portuguese)**
  3. **Lambert Wilson (French)**
  4. **Li Bingbing (Chinese)**
  5. **Marce la Reclicladora (Spanish)**
  6. **Rocky Dawuni (English)**
  7. **Wang Junkai (Chinese)**

All animations will be available on ICRI's YouTube channel:

Search:
"International Coral Reef Initiative"



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What did we learn?

- Support for the GCRMN network remains strong
- Enormous value in a quantitative approach:
  - Global, regional, sub-regional status and trends
  - Global and regional impacts of large scale disturbances (i.e coral bleaching, disease)
- Delivery of key messages through partnerships strengthened delivery

- BUT:
  - Huge variation in how and what data are collected
  - Lowest common denominator: Hard coral cover and algae
  - No quantitative analysis of fish, community composition, socio-economic data
  - More difficult to incorporate local scale information

- COVID presented challenges

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What next?

- Build on the momentum of the report
- Strengthen coordination
  - Steering Committee meeting early 2022
- Build sustainable funding

- Workshops (COVID and funding permitting)
  - Prioritisation
  - Building capability and capacity

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- **Data**
  - **Enhancing data management and access through partnerships**
  - **Greater interoperability and re-use through the adoption of standards**
  - **Establishing database protocols to consolidate data for use in policy processes**
  - **Encourage data publication to provide better access, attribution, transparency, reproducibility**
  - **Broadens what we can report (benthic composition, fish, socio-economic)**
  - **Underpins management of coral reefs and investment in protection and restoration**

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