Taiwan (mainland + offshore islands)

Regional summary of 8 dive sites (7 with their own page). Figures are averages across the sites that report them (n = sites with a value); each site's own page has its individual values. Part of the Taiwan overview.

0 — 5

Coral Health Index: TBD

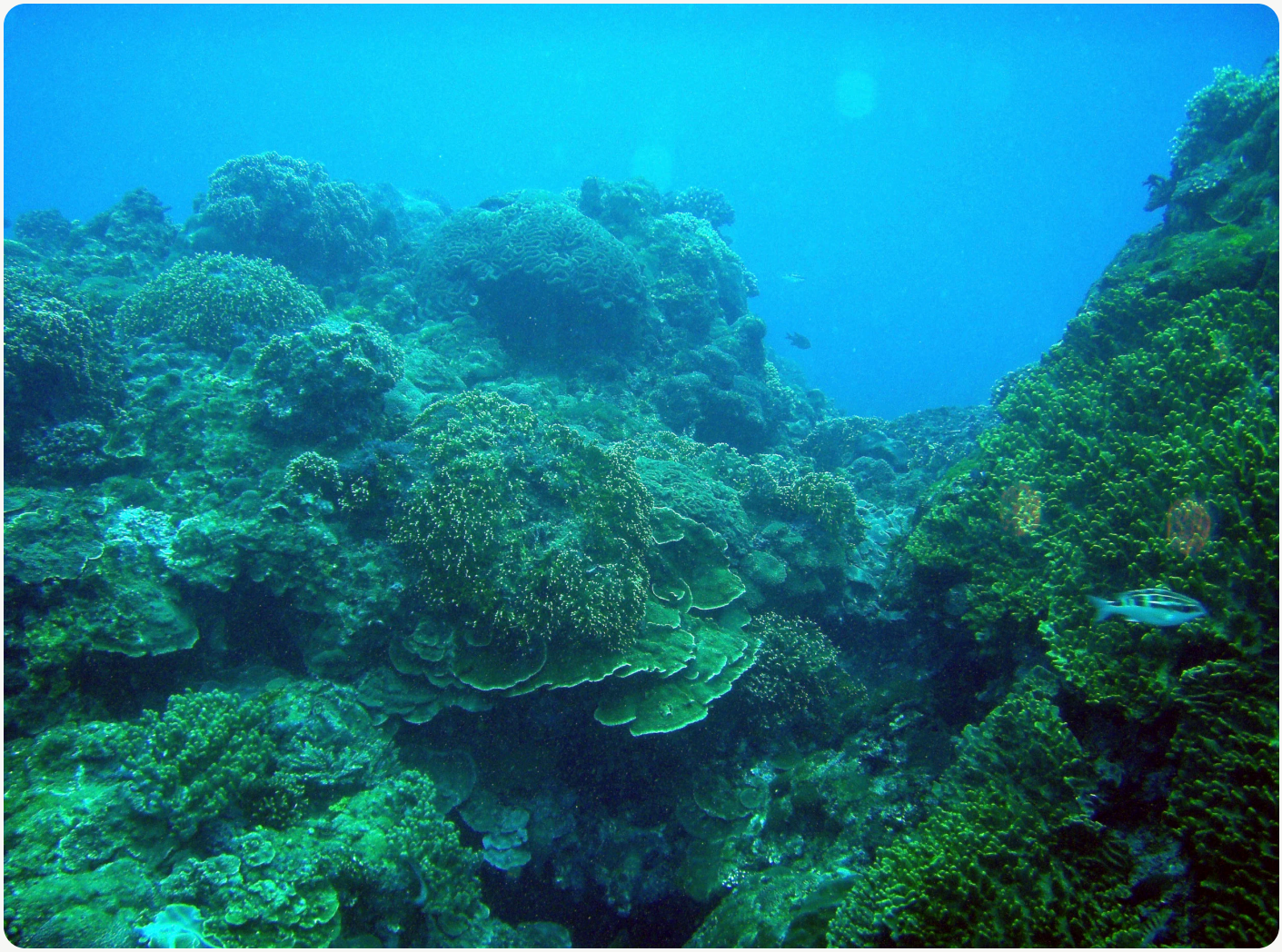


Photo: Anderson Mayfield/Coral Reef Diagnostics — Taiwan - Kenting / Nanwan (mainland)

COUNTRY	SITES	HARD CORAL COVER (REGIONAL MEAN)
Taiwan	8	—
	each linked below	

n = 0 of 8 sites

WATER TEMP. DURING SURVEYS (REGIONAL MEAN)

26.5°C

n = 2 of 8 sites; surveyed Feb 2008–Jul 2011; 1 site logged as a range, counted at its midpoint

CORAL HEALTH INDEX (REGIONAL MEAN)

not yet scored

n = 0 of 8 sites

MOST RECENT WATER TEMPERATURE RECORD

28.5°C

26 Oct 2026 · Southern Taiwan

MOST RECENT HEAT STRESS RECORD

0.8°C-weeks

26 Oct 2026 · Bleaching Watch

MEAN ANNUAL MAX DEGREE HEATING WEEKS (DHW), LAST 5 YEARS

12.6°C-weeks 🔥

2021–2025 · Southern Taiwan

HIGHEST ANNUAL HEAT STRESS

22.0°C-weeks 🔥

in 2024 · Southern Taiwan

SEVERE HEAT-STRESS YEARS

9

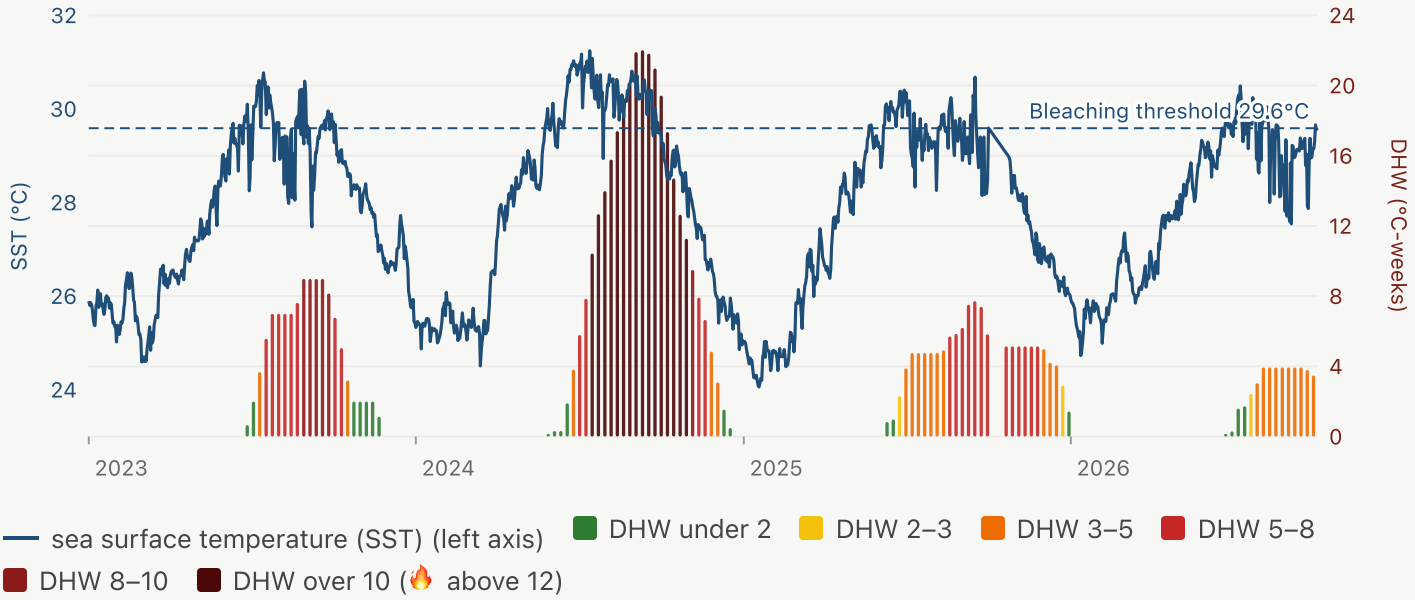
1985–2025 · 7 in the last 10 years

Heat-stress figures: NOAA Coral Reef Watch — Southern Taiwan 5-km virtual station. Each pill links its source record and carries the values behind it.

REGIONAL SUMMARY

Taiwan's southern Kenting coast and offshore islands are known mainly from Anderson's 2008-2011 dive logs, including more than fifty Kenting dives for the diver's upwelling coral research. The diver's logs praise Lanyu's coral caverns and Green Island's soft coral meadows, though no coral cover was measured.

Heat stress



Daily SST (line) and weekly maximum Degree Heating Weeks (bars), Jan 2023–Oct 2026, NOAA Coral Reef Watch 5-km Southern Taiwan virtual station. Dashed line: bleaching threshold (maximum monthly mean 28.6°C + 1°C). DHW ≥ 4: bleaching likely; ≥ 8: severe bleaching and mortality likely. A bar is drawn only where DHW exceeds zero, so a stretch with no bar is accumulated heat stress of zero, not missing data — the SST line runs the full period.

Long-term record: 9 years from 1985 through 2025 reached 8 or more °C-weeks at NOAA's Southern Taiwan station. Download the annual DHW data (CSV).



8 sites in this region — click a marker to open that site.

Read this summary in: English 繁體中文

Regional setting

Although Taiwan lies well north of the main reef belt, Spalding et al. (2001) note that it supports well-developed coral communities, chiefly along its southern coast and around offshore islands.

The Kuroshio Current brings warm water along the southern and eastern shores, though its influence weakens in winter under the Northeast Monsoon, and some 300 hard coral species and 1,200 fish species have been recorded for the island. Among the best-known mainland reefs are the fringing communities of the Hengchun Peninsula and Kenting National Park (established 1982). Sand channels break them into a discontinuous chain, their fauna varies markedly from place to place, and some areas are dominated by alcyonarians; about 250 scleractinian species in 58 genera and 39 alcyonarian species in 11 genera have been recorded there. Hsiao-Liu-Chiu, in the northern South China Sea, has diverse fringing reefs, and the volcanic islands of Lan-Yu and Lu-Tao off the east coast sit in the path of the Kuroshio and carry diverse reef communities. The atlas estimates about 940 km² of coral reef for Taiwan as a whole, not for these coasts alone. Surveys in 1999 and 2000 suggested that about 20% of coral colonies died in the extensive 1998 bleaching. The authors list fishing, coastal development, and tourism as the main pressures, and report nuclear power plants near several reefs and a nuclear waste site on Lan-Yu.

Summarizing the 2004 status reports for East and North Asia, Wilkinson (2006) found human activity still the main threat, made worse by coral bleaching and several severe recent typhoons, with heavy sediment runoff, rapid coastal development, and fishing pressure at extreme levels in most areas; reefs near dense human activity kept declining while remote reefs recovered from the 1998 losses. Souter et al. (2021) do not report Taiwan's trends separately. Across the East Asian Seas they found that hard coral cover rose from 33% in 1999 to 41% in 2009, fell to 35% by 2012 after the 2010 mass bleaching, and slipped to 33.9% in 2017 after the 2016 event, a relative loss of about 11% over the decade. They also list Taiwan among the places hit by severe bleaching in 2020.

Overview

The eight sites in this group cover the Kenting/Nanwan coast at Taiwan's southern tip, Hsiao Liouchiou off the southwest coast, and Green Island and five Lanyu (Orchid Island) sites off the southeast. The record here is mainly Anderson's own 2008-2011 dive logs rather than surveys; no coral cover was measured at any of these sites. Recorded maximum depths per site ran from 13.7 m at Green Island to 35.1 m at Yeyou on Lanyu, and the dated offshore dives fall between 12 July and 21 September 2008. Kenting/Nanwan is a regional marker covering more than fifty logged dives from 3.7 m to 33.5 m. They support the diver's SHVTS work comparing *Seriatopora hystrix* at cold-upwelling Houbihu with non-upwelling Houwan, and include collections of *Seriatopora*, *Pocillopora damicornis*, and *Stylophora pistillata*, a coral-spawning night dive, dives in a power-plant thermal outlet at roughly 30°C, and a dive near a sewage outfall where coral was overgrown by algae.

The Kenting photographs show a branching *Acropora* thicket at the edge of a silt-sand plain, a densely covered but turbid slope of stacked plating colonies and a large brain coral, and a steep plating wall hung with feather stars. Murky water is a recurring complaint in the logs. The offshore islands read very differently in them. At Green Island, four shallow dives in August 2008 logged visibility of more than 45 m ('150 ft-plus'), soft coral meadows, and '1,000 year old *Porites* colonies.' The Lanyu dives in July and September 2008 logged a 20 m ledge of high coral diversity with sea snakes at Yeyou, a fish-filled cavern and tunnel system at Blue Hole, coral caverns and 50 m visibility at Hen's Rock, a sea snake that followed the divers for 15 minutes at Lion's Head Rock, and abundant hard coral south of Twin Lion Rocks. The three Hsiao Liouchiou dives were fieldwork, checking an artificial reef and swapping settlement tiles, in water murky from run-off but over surprisingly nice coral.

These are unquantified diver impressions. Reef Check surveys around Lanyu recorded 6.3-67% hard coral cover between 1998 and 2019. Reef Check surveys at Houbihu, 1.5 km from the Kenting marker, averaged 18% hard coral in 2024 and 22% in 2025.

Highlights

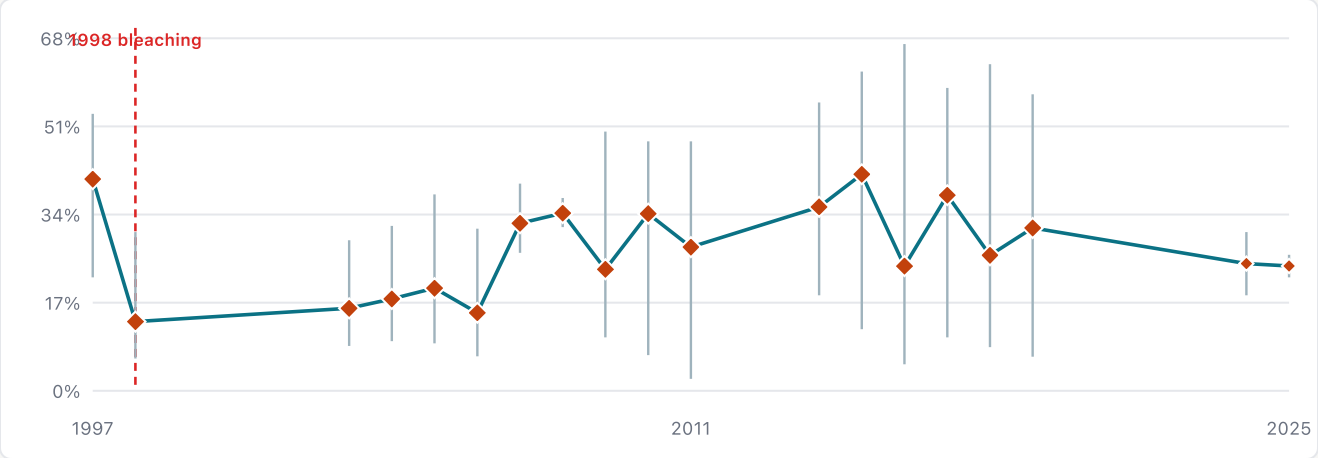
- Kenting/Nanwan hosts more than fifty logged dives (2008-2011) behind the SHVTS *Seriatopora hystrix* upwelling work.
- Anderson's Lanyu logs record sea snakes, coral caverns, and 50 m visibility.
- Anderson's Green Island log records soft coral meadows and very old *Porites* colonies.
- No coral cover has been measured at any site in this unit; nearby Reef Check values range from 6.3% to 67%.

Notable observations

- Taiwan - Kenting / Nanwan (mainland): Log entries record coral overgrown by algae beside a sewage outfall, dives in a power-plant thermal outlet (~30°C), and 2009 typhoon destruction of branching acroporids; one of Anderson's frames, recorded as bleaching, shows partial bleaching of a large massive coral (photo not shown); no disease or predation resolvable in the photographs 

Coral cover over time (pooled)

One point per year: the mean of every hard coral cover value available for this region that year — Anderson's own dives and every independent survey station within 5 km of them. The vertical bar is the full range behind that mean. Different programs use different methods at different stations, so this is a regional summary, not a single comparable series. Years resting on fewer than three values are drawn as smaller points (2024, 2025). Non-CRD points are from Reef Check Foundation, XL Catlin Seaview Survey (University of Queensland), Meng et al. (Kenting monitoring, unpublished), Ribas-Deulofeu et al. (2016), and Tkachenko and Soong (2010).



Sites in this region

- Taiwan - Green Island (Ludao, offshore) — 38% (nearest station surveyed in the last 10 years, not this site: Reef Check, Chenshiang station, 2019-04-11, 1.70 km away)
- Taiwan - Hsiao Liouchiou Island (north shore) — 19% (nearest station surveyed in the last 10 years, not this site: Reef Check, Beauty Cave station, mean of 2 surveys (5 m and 10 m), 2019-10-30, 0.97 km away)
- Taiwan - Kenting / Nanwan (mainland) — 15% (nearest survey station, not this site: XL Catlin Seaview Survey, transect 42011 station, 2018-05-03, 0.71 km away)
- Taiwan - Lanyu (Orchid Island): Blue Hole (Yeyou large boat harbor) — 48% (nearest station surveyed in the last 10 years, not this site: Reef Check, Beauty Rock station, mean of 2 surveys (5 m and 10 m), 2019-06-30, 1.94 km away; the station's published position is on land)
- Taiwan - Lanyu (Orchid Island): Hen's Rock (north shore) — 57% (survey at this site: Reef Check, Hen Rock station, mean of 2 surveys (5 m and 10 m), 2019-06-30, 0.00 km away)
- Taiwan - Lanyu (Orchid Island): Lion's Head Rock — 44% (nearest station surveyed in the last 10 years, not this site: Reef Check, Nipple Mountain station, mean of 2 surveys (5 m and 10 m), 2017-06-10, 1.96 km away)
- Taiwan - Lanyu (Orchid Island): South of Twin Lion Rocks — 43% (survey at this site: Reef Check, Lion Couple Rock South station, mean of 2 surveys (5 m and 10 m), 2019-06-30, 0.00 km away)
- Taiwan - Lanyu (Orchid Island): Yeyou

Nearby external survey stations

245 independent survey records within 5 km of a site in this region (each record counted once; 139 lines, and a line that pools several records says how many).

▶ Show all 245 records

All images from Coral Reef Diagnostics. Data on this page are from Reef Check Foundation, XL Catlin Seaview Survey (University of Queensland), Meng et al. (Kenting monitoring, unpublished), Ribas-Deulofeu et al. (2016), and

Tkachenko and Soong (2010), not Coral Reef Diagnostics; Coral Reef Diagnostics has no coral cover estimate of its own in this region.

© Coral Reef Diagnostics.

References

- Souter D, et al. (eds) (2021) *Status of Coral Reefs of the World: 2020*. International Coral Reef Initiative / Global Coral Reef Monitoring Network. [PDF]
- Spalding MD, et al. (2001) *World Atlas of Coral Reefs*. University of California Press, Berkeley. [PDF]
- Wilkinson C (2006) Status of coral reefs of the world: summary of threats and remedial action. In: Côté IM, Reynolds JD (eds) *Coral Reef Conservation*. Cambridge University Press, Cambridge. [PDF]
- Ribas-Deulofeu L, Denis V, De Palmas S, Kuo CY, Hsieh HJ, Chen CA (2016). Structure of Benthic Communities along the Taiwan Latitudinal Gradient. PLOS ONE 11:e0160601. PDF
- Tkachenko KS, Soong K (2010). Protection of habitat types: a case study of the effectiveness of a small marine reserve and impacts of different habitats on the diversity and abundance of coral reef fishes. Zoological Studies 49:195-210.