Taiwan - Dongsha

Regional summary of 6 dive sites. 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

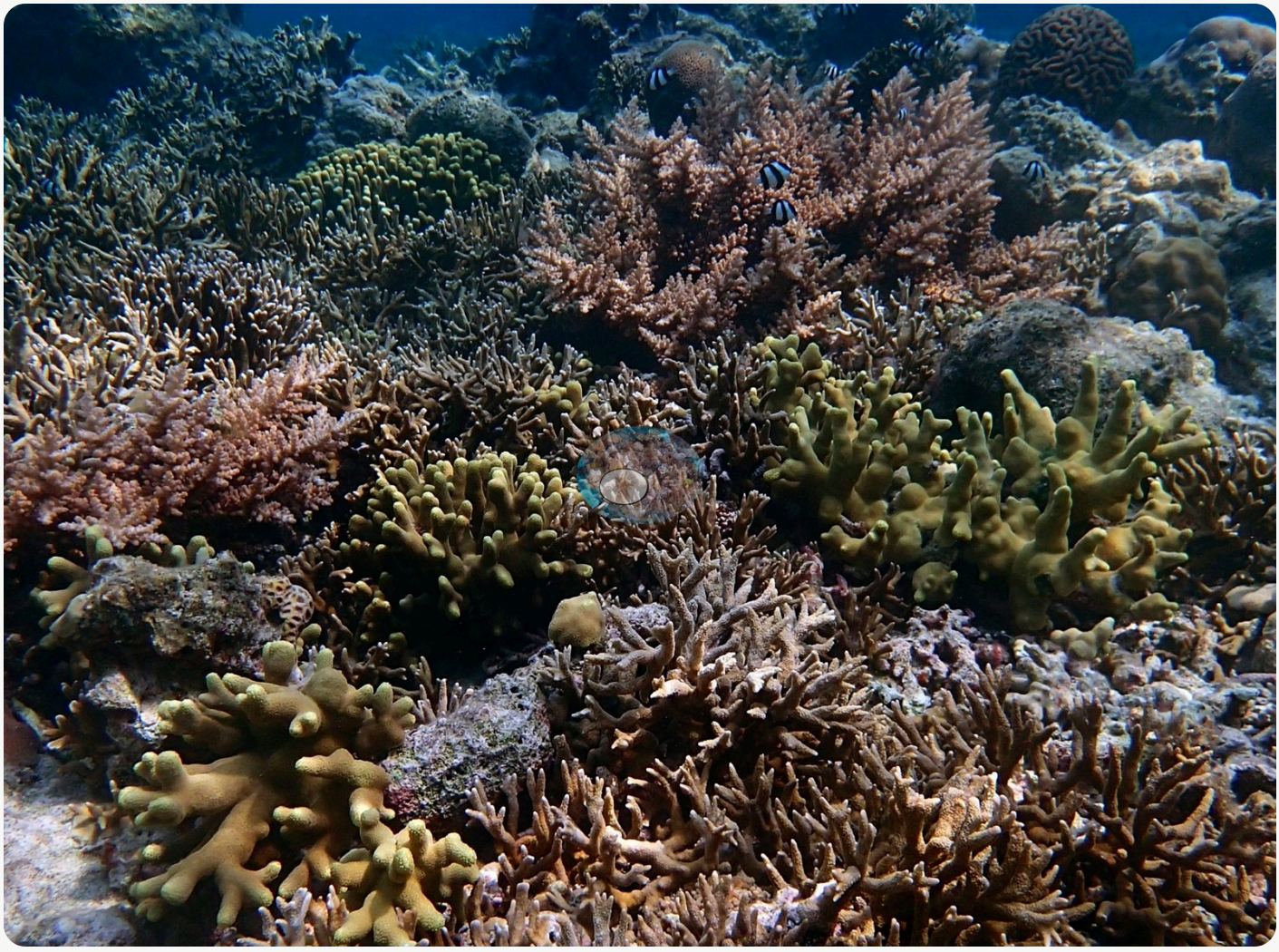


Photo: Anderson Mayfield/Coral Reef Diagnostics — Dongsha Atoll - Site 6 (branching)

COUNTRY

Taiwan

SITES

6

each linked below

HARD CORAL COVER (REGIONAL MEAN; CLAUDE COMPUTER VISION)

41% ± 16% (std. dev.)

n = 4 of 6 sites. range 24–57%

WATER TEMP. DURING SURVEYS (REGIONAL MEAN)

21.8°C

n = 2 of 6 sites; surveyed Apr 2016; 1 site logged as a range, counted at its midpoint

CORAL HEALTH INDEX (REGIONAL MEAN)

not yet scored

n = 0 of 6 sites

MOST RECENT WATER TEMPERATURE RECORD

28.4°C

26 Oct 2026 · Dongsha, Taiwan

MOST RECENT HEAT STRESS RECORD

2.9°C-weeks

26 Oct 2026 · Bleaching Watch

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

13.6°C-weeks 🔥

2021–2025 · Dongsha, Taiwan

HIGHEST ANNUAL HEAT STRESS

22.3°C-weeks 🔥

in 2024 · Dongsha, Taiwan

SEVERE HEAT-STRESS YEARS

12

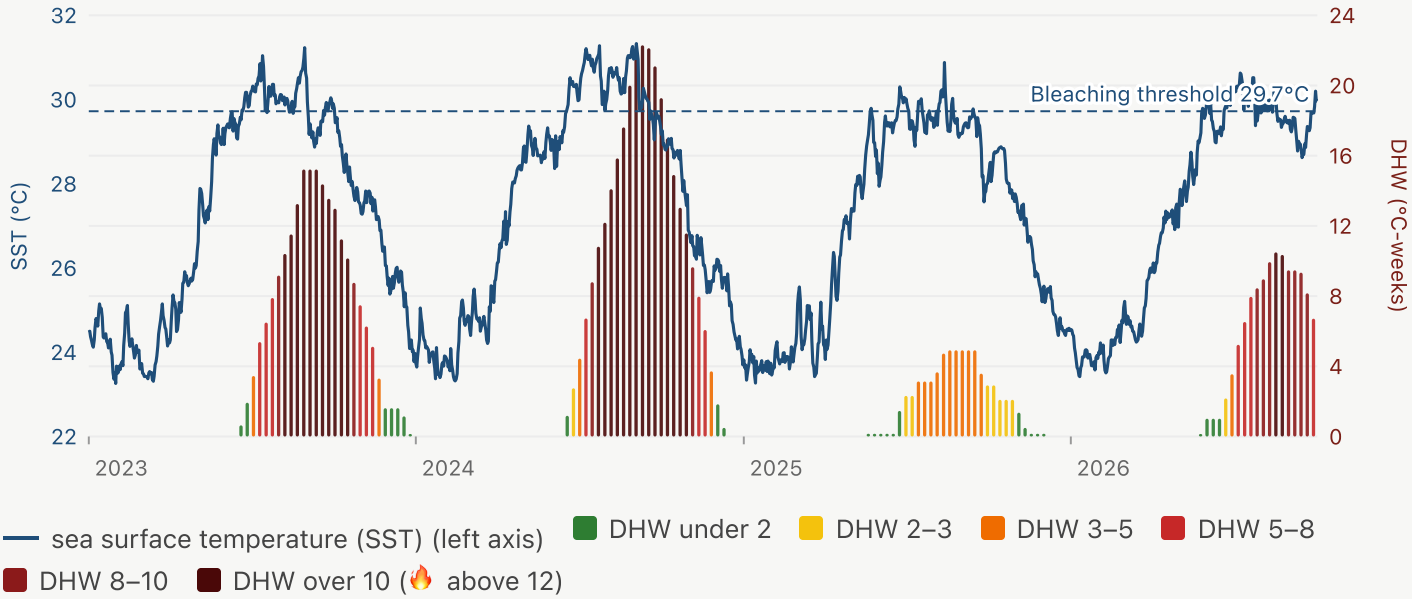
1985–2025 · 7 in the last 10 years

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

REGIONAL SUMMARY

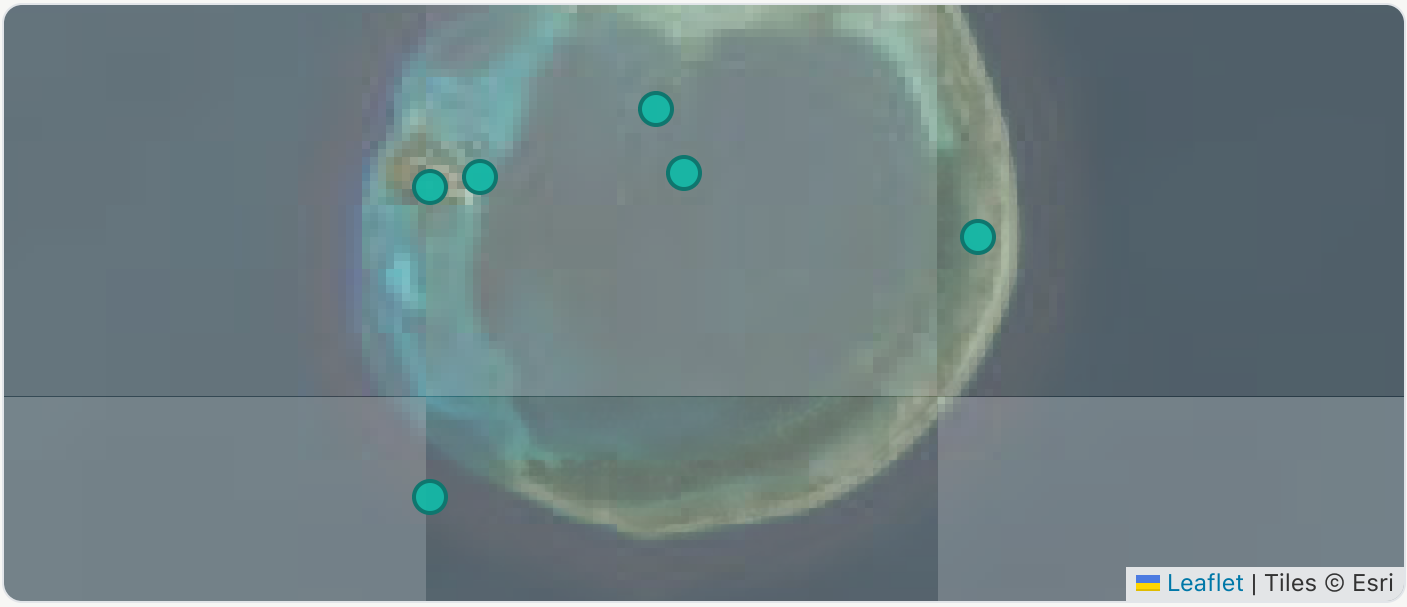
Dongsha Atoll stations, photographed in April 2016 while sampling corals for heat tolerance, range from a vast finger-coral bank with tiered plate pinnacles to a high-relief hard coral reef. Most sampled pocilloporids were recorded as healthy, and no crown-of-thorns or disease fronts were seen.

Heat stress



Daily SST (line) and weekly maximum Degree Heating Weeks (bars), Jan 2023–Oct 2026, NOAA Coral Reef Watch 5-km Dongsha, Taiwan virtual station. Dashed line: bleaching threshold (maximum monthly mean 28.7°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: 12 years from 1985 through 2025 reached 8 or more °C-weeks at NOAA's Dongsha, Taiwan station. Download the annual DHW data (CSV).



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

Read this summary in: English 繁體中文

Regional setting

Spalding et al. (2001) treat the Tung-Sha (Dongsha Qundao) reefs apart from Taiwan, in a section shared with the Spratly and Paracel Islands. They place the reefs in the northern South

China Sea, built around a large submerged atoll that carries a single island. By regional standards diversity is not high, although more than 70 coral species had been recorded. Sovereignty is disputed between China and Taiwan, and Taiwan maintains a lighthouse and a meteorological station on the island. The atlas gives no separate reef-area estimate for the atoll.

Neither later source reports on Dongsha itself. Summarizing the 2004 status reports for East and North Asia, Wilkinson (2006) found that reefs close to heavy human activity were still declining, while remote reefs were recovering from the losses of the 1998 bleaching. For the East Asian Seas as a whole, Souter et al. (2021) link abrupt drops in hard coral cover to the mass bleaching events of 2010 and 2016, amounting to a relative loss of about 11% over the decade to 2019. They caution that monitoring in the region has concentrated on accessible, well-known reefs, so remote reefs are poorly represented in these trends.

Overview

The six Dongsha (Pratas) Atoll records record Anderson's Dongsha Atoll Research Station work in the open South China Sea. There is a regional atoll marker and four numbered stations (Sites 6, 7, 12, and 13), photographed on 4-5 April 2016, where pocilloporid corals were sampled in the search for heat-tolerant genotypes, plus two dives on 6 April 2016 at a site whose position was not recorded. Dr. Coral sampled 28 *Pocillopora damicornis* / *P. acuta* colonies across three sites: 12 at Site 13 on 4 April 2016, and 8 each at Sites 6 and 7 on 5 April 2016. The stations are structurally varied. Site 13 is a vast, low bank of yellow-green to olive finger-form coral running to the limit of visibility, with giant massive *Porites*-type domes, one mushroom-shaped and deeply undercut, and tiered plate-coral pinnacles standing 2-3 m clear of the reef. Site 6 is a high-relief, near wall-to-wall hard coral reef of branching and tabular *Acropora*, meter-wide *Porites* domes, brain corals, red sea fans, and broad foliose plate fields. The 6 April dives, at a position not recorded, found a lower, more turbid flat carpeted with hundreds of leathery soft corals.

The other stations are patchier. Site 7 is a mosaic of dense living coral banks separated by broad stretches of older, turf-coated dead rubble and pavement. Site 12 is a field of thin, tiered foliose plates, most of them dead and silt-coated (the field sheet: mostly *Echinopora* rubble, low live cover), broken by a dense branching thicket; a transect tape runs across its frames. Old dead branching rubble also appears at Site 6, where a live thicket has re-established on top of it. Blind Claude computer-vision point counts put coral cover at 57% at Site 6 (edited and unedited photos), 54% at Site 13, 30% at Site 7, and 24% on the 6 April dives (edited and unedited photos); Sites 13 and 7 have only unedited camera originals, and Site 7 rests on 16 photos. Site 12 has no cover value.

Anderson's sample sheets record the majority of sampled colonies as healthy: seven of the eight at Site 7 (one lightly pigmented) and ten of the twelve at Site 13, where one colony was about 20% bleached and another had 20% recent mortality. At Site 6, the sample sheet records storm damage and old partial mortality among the eight colonies sampled. Site 13 also has derelict monofilament line on a *Porites*-type colony and one patch of recent tissue loss. No crown-of-thorns seastars, *Drupella* aggregations, or disease fronts were seen at Sites 6, 7, or 13. Fauna highlights include a loose group of large cuttlefish at Site 6, a barracuda on the 6 April dives, dense damselfish aggregations, and a giant clam at Site 13.

Highlights

- Site 13 carries tiered plate-coral pinnacles 2-3 m tall above a vast digitate coral bank.  photo: Dongsha Atoll - Site 13
- Site 6 is a high-relief hard coral reef; the 6 April dives, at a position not recorded, crossed a soft-coral flat.  photo: Dongsha Atoll - Site 6 (branching)
- At Site 7, Anderson's sample sheet records seven of the eight sampled colonies as healthy and one as lightly pigmented (April 2016).  photo: Dongsha Atoll - Site 7 (branching)
- Derelict fishing line was found on a coral colony at Site 13.  photo: Dongsha Atoll - Site 13
- No crown-of-thorns seastars, *Drupella* aggregations, or disease fronts were seen in any frame from Sites 6, 7, and 13.

Notable observations

- Dongsha Atoll - Site 13: Derelict monofilament fishing line draped across a knobby Porites-type colony with pale contact patches; recent partial tissue loss (bare white skeleton with a sharp margin) on a massive dome, cause not determinable; Anderson's sample sheet records one of the twelve sampled colonies about 20% bleached and one with 20% recent mortality. No crown-of-thorns starfish, Drupella aggregations, or disease lesion fronts in any of the 63 frames. 
- Dongsha Atoll - Site 6 (branching): Old, consolidated dead branching rubble; Anderson's sample sheet records storm damage and old partial mortality among the eight sampled colonies. No crown-of-thorns starfish, Drupella aggregations, or disease lesion fronts in any of the 123 frames. 

- Dongsha Atoll - Site 7 (branching): Sample sheet: seven of the eight sampled colonies healthy, one lightly pigmented; extensive old, turf-coated dead rubble pavement. No crown-of-thorns starfish, Drupella aggregations, disease lesion fronts, or predation scars in any of the 47 frames. 
- Dongsha Atoll - Site 12: Most foliose plates dead and silt-coated (the field sheet: mostly Echinopora rubble, low live cover). 

Sites in this region

- Dongsha Atoll - Site 12
- Dongsha Atoll - Site 13 — 54%† coral cover
- Dongsha Atoll - Site 6 (branching) — 57%† coral cover
- Dongsha Atoll - Site 7 (branching) — 30%*† coral cover
- Dongsha, 6 April 2016 — 24%† coral cover
- Taiwan - Dongsha / Pratas Atoll (South China Sea)

* Based on only 10–19 reef-habitat photos; this estimate is less certain.

† Includes unedited photographs: edited versions of most of this dive's photos do not exist.

All images from Coral Reef Diagnostics. Data are from Coral Reef Diagnostics.

© 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]