Fiji - Nayau

Island summary of 4 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 Fiji - Northern Lau (Vanua Balavu / Cicia / Nayau) regional summary.

0 — 5

Coral Health Index: TBD

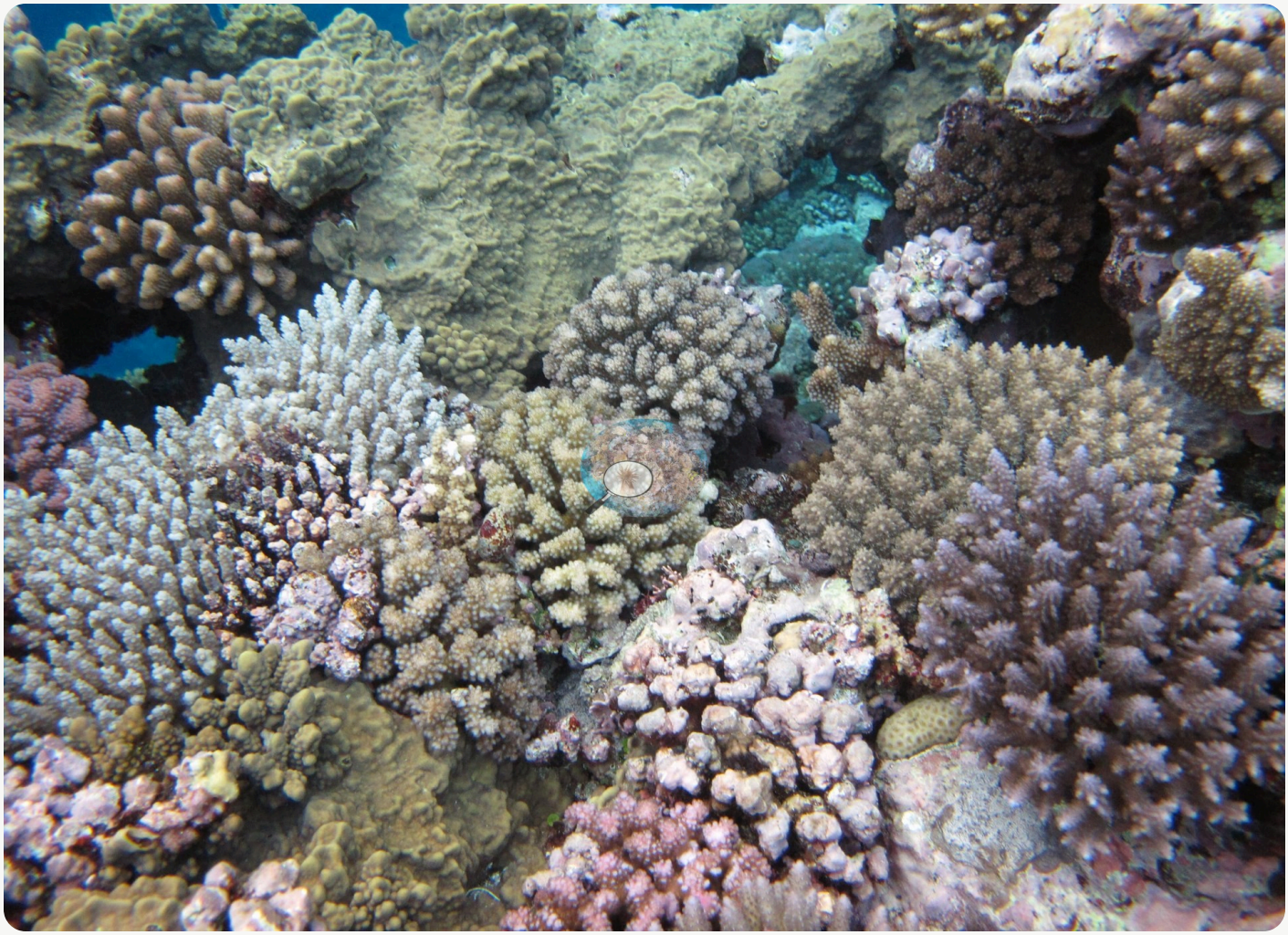


Photo: Anderson Mayfield/Coral Reef Diagnostics — Fiji - Nayau (FJNA40)

COUNTRY

Fiji

SITES

4

each linked below

HARD CORAL COVER (ISLAND MEAN)

48% ± 4.4% (std. dev.)

n = 3 of 4 sites. range 44–52%

WATER TEMP. DURING SURVEYS (ISLAND MEAN)

27.1°C

n = 3 of 4 sites; surveyed Jun 2013; all are station CTD-cast midpoints, not dive readings

CORAL HEALTH INDEX (ISLAND MEAN)

not yet scored

n = 0 of 4 sites

MOST RECENT WATER TEMPERATURE RECORD

25.8°C

26 Oct 2026 · Fiji

MOST RECENT HEAT STRESS RECORD

0.0°C-weeks

26 Oct 2026 · No heat stress

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

8.9°C-weeks

2021–2025 · Fiji

HIGHEST ANNUAL HEAT STRESS

16.7°C-weeks 🔥

in 2026 (to date, 26 Oct) · Fiji

SEVERE HEAT-STRESS YEARS

11

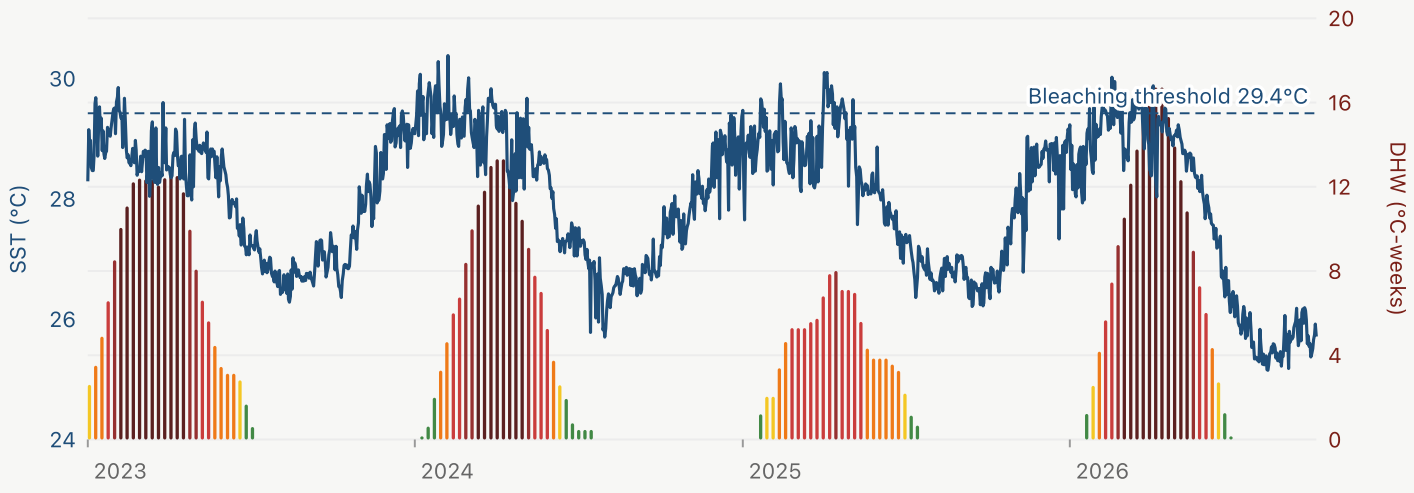
1985–2025 · 6 in the last 10 years

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

ISLAND SUMMARY

Nayau's northwest fore-reef slopes, surveyed in June 2013, held 44-52% coral on large Acropora build-ups, with Drupella snails on several colonies and an old anchor chain colonized by small corals.

Heat stress



sea surface temperature (SST) (left axis) DHW under 2 DHW 2–3 DHW 3–5 DHW 5–8 DHW 8–10 DHW over 10 (🔥 above 12)

Daily SST (line) and weekly maximum Degree Heating Weeks (bars), Jan 2023–Oct 2026, NOAA Coral Reef Watch 5-km Fiji virtual station. Dashed line: bleaching threshold (maximum monthly mean 28.4°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: 11 years from 1985 through 2025 reached 8 or more °C-weeks at NOAA's Fiji station. Download the annual DHW data (CSV).



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

Overview

Nayau is a small island in the Lau group of eastern Fiji. Four Global Reef Expedition stations were logged on its northwest side on 16 June 2013: three transect stations (FJNA38, FJNA39, FJNA40) and a 2 m snorkel site about 0.85 km away (FJNA38SN), which has no cover record. Maximum dive depths were 16.2 m at FJNA39 (Living Oceans Foundation (LOF) team log), 21.3 m at FJNA40, and 31.1 m at FJNA38, while the survey notes describe the setting as shallow fore-reef slopes.

Coral cover was high at all three transect stations, from 44% at FJNA40 to 52% at FJNA39, with FJNA38 at 48%. Algae covered 33% (FJNA39) to 39% (FJNA40) of the benthos. The survey team's notes for the northwest side describe large *Acropora* build-ups with rubble piled at their bases and *Tydemania* macroalgae creeping up their sides, and large plating *Diploastrea* prominent at 15 m. FJNA39 is a classic spur-and-groove reef with well-developed coral on the spur tops and grooves scoured and filled with rubble, and the FJNA38 frames show coralline-sheeted framework carrying many small colonies rather than a few large ones. An old anchor chain at FJNA38 has been colonized by small *Pocillopora*.

The survey notes record coral-eating *Drupella* snails on several *Acropora* colonies. At FJNA40 Anderson photographed a bleached pocilloporid and a second one with pale, partly bleached tissue. No crown-of-thorns is recorded for Nayau's own stations, and none carries a station-level Coral Health Index; Anderson's sampling sheet records four of the seven colonies sampled at FJNA38 as 1–10% pale or bleached, and the photographs of a tagged probe colony there (tag 092) show its upper branches partly bleached (photos not shown).

Highlights

- Cover from 44% (FJNA40) to 52% on a classic spur-and-groove reef with well-developed coral on the spur tops (FJNA39). 
- Large *Acropora* build-ups with rubble piled at their bases and *Tydemania* macroalgae creeping up their sides, as the survey notes record for all three Nayau stations.  photo: Fiji - Nayau (FJNA38)
- An old anchor chain lying across the pavement, with small *Pocillopora* colonies established on link after link (FJNA38). 
- *Drupella* snails on several *Acropora* colonies, as the survey notes record for Nayau's northwest side (station not stated).

Notable observations

- Fiji - Nayau (FJNA40): Bleaching: a bushy pocilloporid Anderson recorded as bleached, uniformly cream-white, and a second pocilloporid with pale, partly bleached tissue between still-brown polyps (single colonies, no extent inferred). The survey team's notes for Nayau's northwest side record Drupella snails on several Acropora colonies (station not stated). No crown-of-thorns starfish recorded. 
- Fiji - Nayau (FJNA38): Debris: an old anchor chain lying across the pavement has been colonized by small Pocillopora. 

Sites in this region

- Fiji - Nayau (FJNA38) — 48% coral cover
- Fiji - Nayau (FJNA39) — 52% coral cover

- Fiji - Nayau (FJNA40) — 44% coral cover
- Fiji - Nayau snorkel (FJNA38SN)

% coral cover by method

Pooled across 1 dive site

Method	Mean % coral cover	Std. dev. between dive sites	n dive sites	Note
CoralSCOP (SAM-based mask-sum), edited photos	31%*	—	1	1 of these 1 values rests on 10–19 photographs (*)
Claude (Anthropic), blind point count	28%*	—	1	1 of these 1 values rests on 10–19 photographs (*)
In-water diver transect (line/point intercept)	44%	—	1	—

The mean is an UNWEIGHTED mean of the dive site values — each dive site counts once, whatever its photo count — which is the convention of the published tables and of every other figure on this page. Each value is the one printed on that dive site's own page; a page that prints no value for a method (fewer than 10 photographs) is left out of that method's mean.

This table pools only the one dive site in this unit that has a method comparison; the table for all 10 dive sites is on the Fiji - Lau page.

Deviation from the reference

Over the dive sites where an independent reference exists, Claude (Anthropic), blind point count has a mean absolute deviation of 16.0 pp from it across 1 dive site. Not in this ranking: CoralSCOP (edited), which measures coral area rather than points. A mean absolute deviation is not an accuracy score: a model with a consistent offset is correctable, while one with the same deviation scattered in both directions is not.

By dive site

Dive site	CoralSCOP (edited)	Claude	Diver transect
FJNA40	31%* n=15	28%* n=15	44%

n under each value is the number of photographs that method scored at that dive site. ⚠ marks a cell that is not an independent check. * marks a value resting on only 10–19 photographs, which is less certain.

Reference: LOF Global Reef Expedition in-water transects (mean of all the station's transects, Living Oceans Foundation per-transect benthic data). Denominator: line/point intercept along the transect; not a photo-point

denominator. Source: LOF Global Reef Expedition 2013, per-transect benthic data ('GRE data-full benthic'): the mean of all of each station's transects For all 10 dive sites in the comparison: The transect is THE coral-cover value at every site; the Claude photo estimate is a methods comparison only, never averaged with the transect and never a headline. Site-level only: the photos come from the survey dives, not from the transect points. Few usable habitat photos exist for Fiji: only 10 sites have 10 or more, and 9 of them have fewer than 20 (low-n), so these are not confident site estimates. Accuracy, Claude vs transect, 10 sites: mean difference -5.4 pp (95% CI -12.7 to +1.9), mean absolute difference 10.3 pp, r 0.35. Claude reads lower than the transect at most sites and does not track it from site to site. This is a methods comparison, not a ranking.

All images from Coral Reef Diagnostics. Data are from the Khaled bin Sultan Living Oceans Foundation Global Reef Expedition and Coral Reef Diagnostics.


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References

- Global Reef Expedition: Lau Province, Fiji. Field Report (Khaled bin Sultan Living Oceans Foundation), survey notes 2013