



Chagos Archipelago - Great Chagos Bank West / Brothers / Eagle



Regional summary of 50 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 [Chagos Archipelago](#) overview.

0

5

Coral Health Index: 3.75/5



Photo: Anderson Mayfield/Coral Reef Diagnostics — [Chagos Archipelago](#) - Great Chagos Bank West (BITB39)

COUNTRY

**Chagos
Archipelago**

SITES

50
each linked below

HARD CORAL COVER
(REGIONAL MEAN)

31% ± 16% (std.
dev.)
n=50. range 4.2–67%

WATER TEMP. DURING
SURVEYS (REGIONAL
MEAN)

29.5°C
n = 46 of 50 sites;
surveyed Mar 2015



CORAL HEALTH INDEX (REGIONAL MEAN)

3.75 / 5

n = 4 of 50 sites; 2.5 =
average (above average)

CORAL BLEACHED (REGIONAL MEAN)

7.5%

n = 47 of 50 sites
([Mayfield & Dempsey
2026](#)).

MOST RECENT WATER TEMPERATURE RECORD

28.9°C

16 Sep 2026 · [Chagos](#)

MOST RECENT HEAT STRESS RECORD

0.0°C-weeks

16 Sep 2026 · below
alert level

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

4.4°C-weeks

2021–2025 · Chagos

HIGHEST ANNUAL HEAT STRESS

17.9°C-weeks 🔥

in 2016 · Chagos

SEVERE HEAT-STRESS YEARS

3

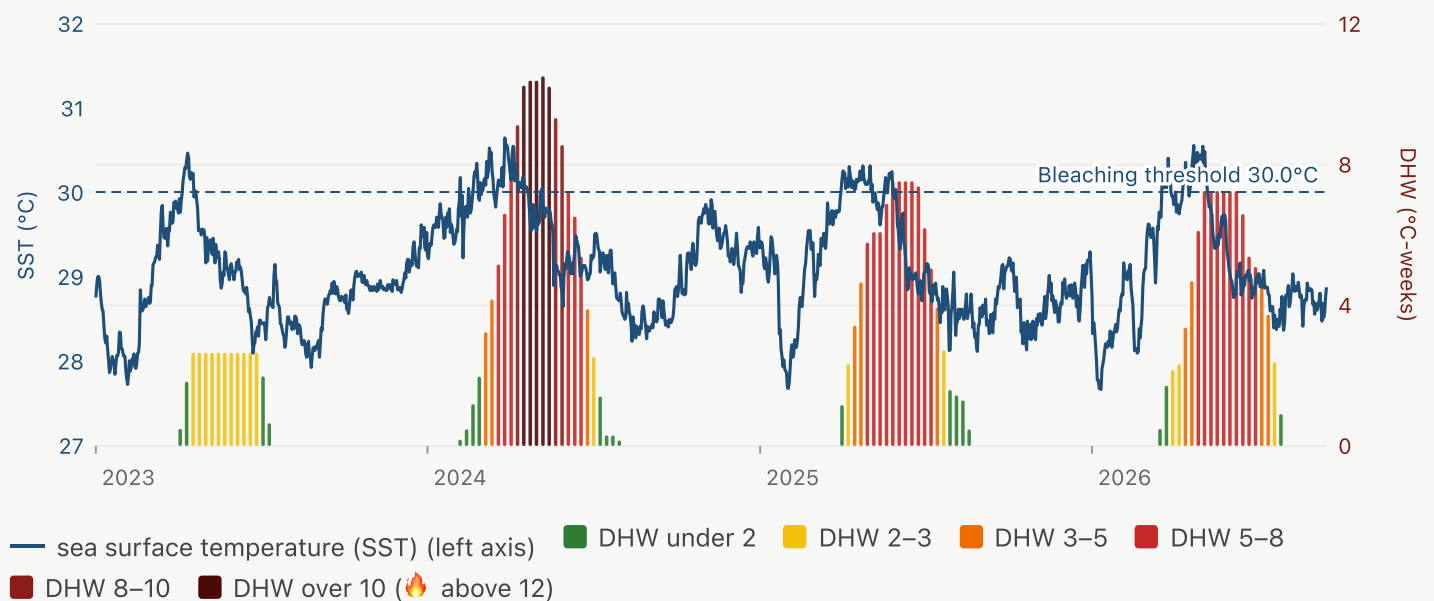
1985–2025 · 2 in the last
10 years

Heat-stress figures: [NOAA Coral Reef Watch](#) — [Chagos](#) 5-km virtual station. Each pill links its source record and carries the values behind it.

REGIONAL SUMMARY

Fifty sheltered lagoon, bank, and channel reefs on the western Great Chagos Bank, dived in March 2015, range from algae-dominated banks to the rich Three Brothers reefs, where one depth band was 93% blue coral. [Sharks](#) were seen throughout, and young corals were recolonizing old dead pavement.

Heat stress



Daily SST (line) and weekly maximum Degree Heating Weeks (bars), Jan 2023–Sep 2026, [NOAA Coral Reef Watch](#) 5-km Chagos virtual station. Dashed line: bleaching threshold (maximum monthly mean 29.0°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: 3 years since 1985 reached 8 or more °C-weeks at [NOAA's Chagos station](#). [Download the annual DHW data \(CSV\)](#).



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

Regional setting

This unit sits on the western side of the [Great Chagos Bank](#), a mostly submerged atoll that [Spalding et al. \(2001\)](#) rank as the world's largest atoll structure, at about 13,000 km². The atlas map places Eagle, the Three Brothers, and Danger Island along the western rim, and both Danger Island and the Three Brothers and Resurgent Islands were declared Strict Nature Reserves in 1998. [Spalding et al. \(2001\)](#) treat the Central Indian Ocean as a zone of transition, with coral diversity peaking in a narrow band, the "Chagos Stricture", centered on the southern [Maldives](#) and the Chagos. The Chagos reefs alone hold some 220 scleractinian species, with faunal ties to both [Indonesia](#) and East Africa. The same chapter ranks the Chagos among the least impacted reefs anywhere, and cites water-quality studies suggesting its waters are among the least polluted on Earth. Low human pressure did not spare these reefs from the 1998 [bleaching](#), however. Corals had typically covered 50–80% of seaward and lagoon slopes to about 40 m, and seaward reefs are estimated to have lost 80–85% of their coral, on average. [Spalding et al. \(2001\)](#) estimate about 3,770 km² of reef across the whole archipelago, and [Souter et al. \(2021\)](#) give 2,731 km² for the Chagos ecoregion.

[Wilkinson \(2006\)](#), drawing on the 2004 status report, describes encouraging recovery in the Chagos after the 1998 die-off. [Souter et al. \(2021\)](#) show Chagos coral cover rising until about 2015 before the 2016 bleaching reversed the gains. That event killed more than 42% of living hard coral across South Asia, yet mortality was lower than in 1998, partly because less coral was left to die and partly because the surviving communities held more bleaching-resistant species. In 1998, [Acropora](#) and [Echinopora](#) had been the most vulnerable genera. Localized bleaching continued from 2017 to 2019. [Souter et al. \(2021\)](#) describe the Chagos atolls as protected, lightly pressured

reefs, within the region's largest marine protected area (MPA), for which bleaching is the main threat.

Overview

This unit covers 50 sites on the western Great Chagos Bank, surveyed between 12 and 28 March 2015: the Three Brothers group, Eagle Island, the Danger Island reefs, and a set of Central Chagos lagoon banks. Most are sheltered lagoon, bank and channel reefs, with fringing forereefs off South and Middle Brother. Logged maximum depths ran from 16.4 m at [BIDI08](#) to 31.1 m at [BIEA24](#) ([BITB49](#), [BITB57](#), BIEA24.5 and [BITB34.5](#) have no logged depth).

Coral cover ranged from 4.2% on the macroalgal meadow at [BIDI12](#), the lowest of all 112 Chagos stations, and 4.8% at [BIEA17](#), smothered by sediment-laden turf, to 61.1% at [BITB34](#) and 67.0% at [BITB58](#), fourth-highest in Chagos. The Three Brothers reefs are the richest. BITB58 has one depth band that is 93% blue coral (*Heliopora*) and the next 80% *Acropora*, and BITB34 is built around whorled plate-coral mounds two to three meters across. [BITB39](#) and [BITB54](#) each carry 34 coral genera, including the endemic *Ctenella* at BITB39. Eagle Island and the Central Chagos banks are sparser, more *Porites*-heavy and rubble-strewn, and [BICC51](#) has the highest algal cover of any Chagos station, 70.0%. At Danger Island, [BIDI08](#) reached 59% cover on large tabular plates, while BIDI12 and [BIDI13](#) are dominated by fleshy macroalgal beds.

These were early-season dives, and Anderson's field record places the start of bleaching in May. Published values ranged from 0.0% at four sites to 27.8% at [BIEA24.5](#), but the photographs do not bear out several of the higher figures, and the 24.2% at [BICC50](#) is considered unreliable. Colony-scale bleaching was nonetheless photographed at [BIEA19](#), [BIDI14](#), and [BITB44](#), and bone-white patches appear at [BITB43](#) and [BIDI16](#) despite their 0.0% figures. A crown-of-thorns starfish was photographed beside removal forceps at [BIEA52](#) and a small one at [BITB55](#). Lesioned brain or massive corals were noted at [BIDI10](#), [BIDI13](#) and BIDI14. At BITB44, dense young *Acropora* recruits on old dead pavement show the reef recolonizing.

Sharks were seen throughout. Gray reef sharks cruised the algal meadow at [BIDI12](#) in nine frames, whitetip reef sharks were recorded at many sites, and a tawny nurse shark appeared at [BIEA26](#). Other sightings included three spotted eagle rays together at [BITB34](#), giant clams at several sites, a hawksbill turtle at [BICC35](#), and a school of several hundred trevally at [BITB33](#).

Highlights

- [BITB58](#): fourth-highest cover of the 112 Chagos stations (67.0%), with one depth band 93% blue coral

(*Heliopora*)

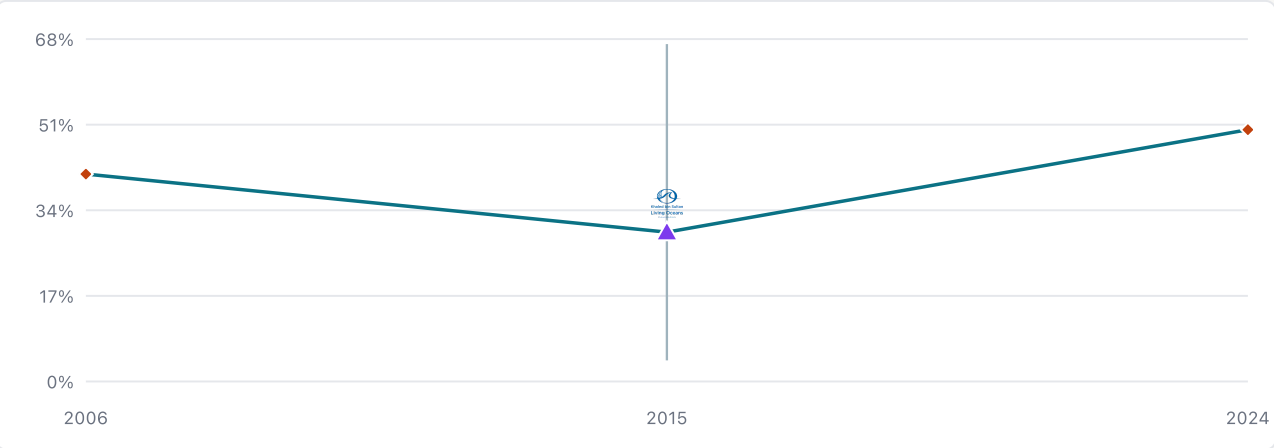


- [BITB39](#) and [BITB54](#) each carry 34 coral genera 
- [BICC51](#) has the highest algal cover of any Chagos station (70.0%) 
- Crown-of-thorns: one removed at [BIEA52](#), a small one seen at [BITB55](#) 
- Logged depths from 16.4 m ([BIDI08](#), 59.0% cover on large tabular plates) to 31.1 m ([BIEA24](#)) 
- Three spotted eagle rays photographed together at [BITB34](#) 

► **Notable observations (19)**

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 (2006, 2024). Non-CRD/LOF points are from [XL Catlin Seaview Survey \(University of Queensland\)](#). Marker shape: ● his own dives, ◆ other organizations’ surveys, ▲ a mix of both, that year,  the year includes his [Global Reef Expedition](#) dives with the [Khaled bin Sultan Living Oceans Foundation](#) (CRD+LOF data).



► **Sites in this region (50)**

% coral cover by method

Pooled across 104 dive sites

Method	Mean % coral cover	Std. dev. between dive sites	n dive sites	Note
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Manual point count (author)	34.0%	±13	28	frame-weighted 40.1% over 613 frames
CoralNet automated point classifier	32.8%	±11	89	frame-weighted 34.0% over 1,895 frames
CoralSCOP (SAM-based mask-sum), edited photos	32.2%	±8.3	104	frame-weighted 33.9% over 2,498 frames
Claude (Anthropic), blind point count	26.5%	±11	104	frame-weighted 29.0% over 2,495 frames
In-house DINOv3 point classifier	30.5%	±11	104	frame-weighted 31.2% over 2,500 frames
In-water diver transect (line/point intercept)	37.7%	±16	101	—

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. The frame-weighted alternative is given per method in the Note column; where the two differ, the difference is a photo-count imbalance, not a coral-cover finding.

Closest to the reference

Over the dive sites where an independent reference exists, Manual point count (author) sits closest to it — a mean absolute deviation of 9.5 pp across 27 dive sites, then [CoralNet](#) automated point classifier 10.5 pp (n=86), Claude (Anthropic), blind point count 13.2 pp (n=101). 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	Manual point count	CoralNet	CoralSCOP (edited)	Claude	DINOv3	Diver transect	coralscapes_v1	coralscapes
BIBL82	17.5% n=4	27.6% n=18	35.8% n=22	28.3% n=22	26.1% n=22	37.9%	42.0% n=22	50.2% n=22
BIBL83	20.8% n=9	25.6% n=6	40.7% n=15	23.8% n=15	24.7% n=15	33.1%	42.2% n=15	45.2% n=15
BIBL86	—	31.9% n=27	25.1% n=27	34.4% n=27	36.0% n=27	47.2%	50.5% n=27	49.4% n=27
BIBL87	—	27.9% n=35	29.5% n=35	30.3% n=35	34.0% n=35	40.6%	41.5% n=35	48.0% n=35
BICC35	—	17.0% n=15	20.5% n=15	6.7% n=15	13.1% n=15	13.8%	21.0% n=15	23.9% n=15
BICC36	—	19.4% n=15	24.7% n=15	6.4% n=15	18.2% n=15	5.8%	21.0% n=15	26.5% n=15
BICC50	—	29.4% n=11	28.8% n=11	15.7% n=11	30.0% n=11	12.1%	36.9% n=11	48.0% n=11

BICC51	—	21.9% n=17	27.5% n=17	20.7% n=17	24.1% n=17	15.4%	26.9% n=17	28.4% n=17
BIDI08	—	36.4% n=35	38.9% n=35	35.2% n=35	29.1% n=35	59.0%	50.2% n=35	53.1% n=35
BIDI09	—	38.0% n=30	32.2% n=30	33.6% n=30	23.6% n=30	37.7%	56.2% n=30	61.0% n=30
BIDI10	—	27.1% n=13	32.9% n=13	22.5% n=13	16.2% n=13	23.0%	44.2% n=13	49.4% n=13
BIDI12	—	10.4% n=14	17.9% n=14	2.9% n=14	11.0% n=14	4.2%	8.2% n=14	10.0% n=14
BIDI13	—	20.5% n=11	24.9% n=11	17.8% n=11	18.2% n=11	7.8%	22.0% n=11	23.5% n=11
BIDI14	—	23.5% n=9	30.3% n=9	19.2% n=9	21.9% n=9	15.2%	26.7% n=9	26.2% n=9
BIDI15	—	24.6% n=9	20.6% n=9	36.4% n=9	37.0% n=9	20.1%	45.3% n=9	48.3% n=9
BIDI16	—	25.6% n=13	30.9% n=13	24.4% n=13	22.3% n=13	30.4%	32.2% n=13	35.6% n=13
BIEA18	—	22.3% n=35	28.1% n=35	17.7% n=35	14.6% n=35	20.7%	32.9% n=35	32.4% n=34
BIEA19	—	27.2% n=14	39.2% n=14	30.8% n=14	25.5% n=14	27.5%	41.9% n=14	44.8% n=14
BIEA20	—	24.6% n=19	27.1% n=19	22.2% n=19	16.0% n=19	10.8%	30.8% n=19	35.4% n=19
BIEA22	—	49.2% n=23	50.0% n=23	30.8% n=23	44.8% n=23	21.6%	44.0% n=23	46.1% n=23
BIEA23	—	35.7% n=24	39.5% n=24	28.5% n=24	28.8% n=24	24.6%	43.8% n=24	49.2% n=24
BIEA24	—	40.6% n=11	39.2% n=11	37.4% n=11	41.2% n=11	12.7%	48.5% n=11	49.3% n=11
BIEA25	—	29.5% n=19	29.8% n=19	16.4% n=19	25.6% n=19	15.7%	31.1% n=19	32.8% n=19
BIEA26	—	21.0% n=30	27.2% n=30	14.5% n=30	14.1% n=30	21.0%	23.3% n=30	28.4% n=30
BIEA52	—	38.1% n=22	39.1% n=22	34.5% n=22	21.8% n=22	34.1%	49.6% n=22	50.0% n=22
BIEG02	25.5% n=21	—	23.7% n=21	18.2% n=21	23.7% n=21	31.8%	31.1% n=21	34.5% n=21
BIEG03	23.9% n=36	—	25.7% n=36	16.6% n=36	18.4% n=36	37.3%	31.5% n=36	34.0% n=36
BIEG04	33.9% n=19	—	28.2% n=19	25.9% n=19	35.1% n=19	29.2%	36.4% n=19	38.7% n=19
BIEG05	40.7% n=35	57.8% n=24	41.4% n=59	39.1% n=59	40.2% n=59	46.7%	61.2% n=59	63.6% n=59

BIEG06	—	44.2% n=30	22.6% n=30	31.6% n=30	34.0% n=30	43.5%	46.0% n=30	46.5% n=30
BIEG07	40.6% n=8	—	26.8% n=8	28.5% n=8	56.7% n=8	47.5%	30.9% n=8	33.5% n=8
BINI77	—	29.8% n=11	33.5% n=11	25.7% n=11	26.1% n=11	43.0%	38.2% n=11	41.1% n=11
BINI78	—	24.4% n=16	28.4% n=16	24.8% n=16	29.0% n=16	19.1%	26.9% n=16	28.6% n=16
BINI79	—	19.4% n=15	21.2% n=15	17.9% n=15	21.6% n=15	31.5%	27.2% n=15	25.0% n=15
BINI80	37.6% n=10	26.8% n=14	34.9% n=24	29.4% n=24	36.9% n=24	42.8%	42.4% n=24	45.9% n=24
BIPB110	—	36.6% n=45	36.7% n=44	29.5% n=45	36.6% n=45	39.3%	44.3% n=43	49.6% n=43
BIPB112	43.6% n=14	—	37.7% n=14	28.7% n=14	44.3% n=14	45.0%	50.6% n=14	55.0% n=14
BIPB114	29.0% n=22	34.4% n=7	35.2% n=29	20.0% n=29	31.7% n=29	39.6%	37.0% n=29	38.5% n=29
BIPB60	38.8% n=38	—	41.9% n=38	29.5% n=38	33.4% n=38	42.2%	55.5% n=38	57.2% n=38
BIPB61	17.9% n=14	—	32.5% n=14	17.0% n=14	22.1% n=14	20.0%	41.0% n=14	43.0% n=14
BIPB62	48.0% n=19	—	31.6% n=19	33.6% n=19	35.3% n=19	59.6%	57.6% n=18	57.5% n=18
BIPB63	46.9% n=29	—	38.4% n=29	35.0% n=29	33.3% n=29	56.0%	66.2% n=29	66.7% n=29
BIPB64	22.7% n=21	—	33.3% n=21	22.8% n=21	26.2% n=21	31.2%	34.3% n=21	41.4% n=21
BIPB65	32.9% n=19	—	27.5% n=19	30.3% n=19	32.3% n=19	41.4%	52.3% n=19	54.9% n=19
BIPB66	12.5% n=6	—	28.8% n=6	2.3% n=6	26.1% n=6	7.0%	41.9% n=6	40.9% n=6
BIPB67	36.4% n=41	—	29.5% n=41	26.1% n=41	33.8% n=41	41.9%	49.3% n=41	52.2% n=41
BIPB68	44.9% n=43	—	39.2% n=43	36.8% n=43	38.5% n=43	55.0%	71.9% n=43	73.8% n=43
BIPB69	54.2% n=110	56.1% n=6	42.6% n=116	39.1% n=116	47.4% n=116	64.7%	74.4% n=116	75.4% n=116
BIPB70	45.4% n=28	45.1% n=27	35.7% n=55	34.9% n=55	40.2% n=55	60.3%	56.6% n=55	59.5% n=55
BIPB72	50.5% n=41	56.1% n=34	39.9% n=75	44.3% n=75	49.2% n=75	72.4%	64.4% n=75	69.0% n=75
BIPB73	—	45.2% n=45	46.9% n=45	37.6% n=45	45.3% n=45	50.1%	48.0% n=45	50.6% n=45

BIPB74	39.3% n=8	56.0% n=13	47.1% n=21	51.1% n=21	48.9% n=21	62.4%	64.5% n=21	65.9% n=21
BIPB75	—	39.2% n=9	43.7% n=9	32.4% n=9	42.2% n=9	43.9%	51.0% n=9	56.5% n=9
BIPB76	—	29.9% n=20	29.0% n=20	20.9% n=20	31.5% n=20	35.9%	34.7% n=20	39.8% n=20
BISA102	—	31.1% n=27	34.4% n=27	21.5% n=27	30.1% n=27	30.9%	33.2% n=27	34.7% n=27
BISA103	—	28.4% n=19	36.1% n=19	30.1% n=19	37.2% n=19	32.5%	40.5% n=19	44.5% n=19
BISA104	—	44.2% n=16	41.0% n=16	35.7% n=16	45.6% n=16	36.2%	46.0% n=16	50.6% n=16
BISA105	—	23.8% n=19	23.4% n=19	27.8% n=19	36.0% n=19	50.3%	41.8% n=19	47.0% n=19
BISA107	—	18.0% n=12	21.7% n=12	18.5% n=12	20.6% n=12	24.6%	32.1% n=12	41.2% n=12
BISA84	25.8% n=2	16.7% n=5	40.1% n=7	17.5% n=7	28.6% n=7	48.8%	35.3% n=7	34.3% n=7
BISA88	—	45.8% n=13	43.4% n=13	42.7% n=13	54.1% n=13	56.7%	55.3% n=13	59.9% n=13
BISA91	—	46.7% n=13	44.0% n=13	40.3% n=13	55.6% n=13	52.4%	58.0% n=13	64.8% n=13
BISA92	—	29.4% n=39	29.0% n=39	18.8% n=39	25.6% n=39	24.5%	33.1% n=39	34.3% n=39
BISA93	—	38.7% n=27	26.4% n=28	33.0% n=27	26.4% n=28	39.1%	58.3% n=26	61.0% n=27
BISA94	—	47.4% n=2	21.4% n=2	23.1% n=2	56.7% n=2	40.3%	43.5% n=2	63.2% n=2
BISA97	—	51.1% n=12	29.4% n=12	51.1% n=12	49.7% n=12	54.4%	67.8% n=12	69.3% n=12
BISP100	—	21.7% n=7	27.0% n=7	31.9% n=7	34.8% n=7	53.9%	42.2% n=7	43.2% n=7
BISP101	—	39.1% n=13	32.6% n=13	23.0% n=13	32.1% n=13	50.0%	42.2% n=13	43.5% n=13
BISP89	—	17.2% n=13	27.6% n=13	19.9% n=13	21.5% n=13	33.2%	28.6% n=13	29.9% n=13
BISP90	—	27.6% n=8	37.9% n=8	24.7% n=8	30.8% n=8	39.8%	41.6% n=8	43.2% n=8
BISP95	—	21.9% n=26	23.1% n=25	17.8% n=26	20.4% n=26	56.9%	28.0% n=26	27.6% n=26
BISP96	—	55.6% n=18	48.2% n=18	51.5% n=18	49.3% n=18	86.0%	69.0% n=18	72.7% n=18
BITB27	—	34.5% n=16	37.5% n=16	23.8% n=16	24.4% n=16	36.6%	45.9% n=16	47.8% n=16

BITB28	—	26.9% n=43	29.0% n=43	18.5% n=43	20.2% n=43	28.5%	33.5% n=43	37.5% n=43
BITB29	—	29.6% n=49	25.9% n=49	18.5% n=49	23.7% n=49	30.2%	39.5% n=49	42.1% n=49
BITB30	—	29.9% n=12	30.3% n=12	14.0% n=12	18.3% n=12	42.5%	33.9% n=12	38.2% n=12
BITB32	—	16.7% n=19	19.9% n=19	11.7% n=19	11.8% n=19	30.3%	17.9% n=19	19.8% n=19
BITB33	—	20.3% n=27	22.3% n=27	7.9% n=27	11.5% n=27	18.5%	18.4% n=26	17.5% n=26
BITB34	—	41.4% n=11	46.6% n=11	37.0% n=11	34.5% n=11	61.1%	56.5% n=11	66.7% n=10
BITB37	—	37.3% n=56	42.4% n=57	29.0% n=56	29.6% n=57	38.8%	51.2% n=55	54.5% n=55
BITB38	—	33.7% n=44	31.5% n=44	26.3% n=44	28.1% n=44	56.0%	54.1% n=44	56.3% n=44
BITB39	—	40.1% n=60	44.4% n=61	36.7% n=60	31.7% n=61	50.3%	53.3% n=59	57.5% n=59
BITB40	—	28.5% n=5	30.8% n=5	23.6% n=5	22.7% n=5	44.9%	39.7% n=5	45.7% n=5
BITB41	—	31.8% n=13	39.5% n=13	24.9% n=13	31.8% n=13	41.9%	40.3% n=13	42.0% n=13
BITB42	—	31.1% n=49	35.4% n=51	22.6% n=49	24.4% n=51	36.2%	39.5% n=50	42.8% n=51
BITB43	—	35.9% n=12	36.6% n=12	22.3% n=12	14.7% n=12	28.7%	46.7% n=12	50.3% n=12
BITB44	—	33.2% n=36	38.7% n=36	26.9% n=36	29.4% n=36	40.5%	44.2% n=36	47.0% n=36
BITB45	—	44.5% n=13	36.1% n=13	33.3% n=13	39.2% n=13	45.6%	50.5% n=13	51.9% n=13
BITB46	—	27.5% n=11	31.3% n=11	18.4% n=11	15.2% n=11	25.8%	34.5% n=10	37.7% n=10
BITB47	—	43.0% n=2	33.2% n=2	25.5% n=2	35.0% n=2	53.7%	46.0% n=2	45.2% n=2
BITB53	—	35.2% n=22	27.4% n=22	23.4% n=22	30.8% n=22	36.7%	40.7% n=22	42.0% n=22
BITB54	—	34.3% n=99	30.9% n=99	29.8% n=99	20.8% n=99	49.5%	50.0% n=97	53.9% n=97
BITB55	—	43.3% n=14	38.3% n=14	33.2% n=14	33.8% n=14	47.6%	47.1% n=14	51.0% n=14
BITB56	—	19.9% n=13	18.0% n=13	19.4% n=13	20.3% n=13	21.3%	25.0% n=13	26.2% n=13
BITB57	—	44.0% n=111	36.4% n=111	43.4% n=111	33.2% n=111	40.1%	65.6% n=111	67.8% n=111

BITB58	—	31.0% n=1	29.9% n=1	31.0% n=1	40.0% n=1	67.0%	28.1% n=1	32.6% n=1
BIVB108	40.0% n=1	25.1% n=10	28.2% n=11	11.7% n=11	23.9% n=11	45.7%	23.2% n=10	18.1% n=11
BIVB109	36.7% n=1	35.0% n=32	24.9% n=33	35.0% n=33	39.0% n=33	34.7%	67.3% n=33	66.1% n=33
BIVB81	—	37.8% n=5	49.2% n=5	56.7% n=5	44.7% n=5	51.7%	60.9% n=5	63.4% n=5
BIVB99	—	20.8% n=11	18.5% n=11	35.4% n=11	24.5% n=11	55.6%	64.2% n=11	62.9% n=11
BICA01	0.0% n=1	—	0.3% n=1	0.0% n=1	3.3% n=1	4.6%	1.3% n=1	0.4% n=1
BIDI16.5	45.6% n=13	38.7% n=11	29.7% n=11	26.3% n=11	41.8% n=11	—	37.2% n=11	39.4% n=11
BIEA24.5	—	19.6% n=5	21.2% n=5	15.2% n=5	20.7% n=5	—	20.3% n=5	22.0% n=5
BITB34.5	—	47.2% n=3	33.4% n=3	21.9% n=3	53.3% n=3	—	29.2% n=3	28.6% n=3

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.

Reference: IN-WATER DIVER TRANSECT, independent of the imagery ([Mayfield & Dempsey 2026](#), Oceans 7:1).

Denominator: line/point intercept along the transect; not a photo-point denominator. Source: published ([Mayfield & Dempsey 2026](#), Oceans 7:1, suppl. S1); formal 38.7% cover / 30.5% bleaching, tourist-diver 35.1% / 31.8% △ The reference here is NOT the same instrument as at [Mauritius](#), [Oman](#), [Kenya](#) or the Red Sea. Those are point counts on the photographs; this is a diver swimming a transect. The models and the reference never saw the same thing. △ SITE-LEVEL ONLY. The 2,500 frames were not associated with any transect taken within 200 m of them, so transect-vs-image comparisons are site means, never frames. The transect value is already in the pin `cover` field (109 of 112 pins, sourced to the paper's suppl. S1) and is read from there, never re-imported.

Nearby external survey stations

6 independent survey records within 5 km of a site in this region (deduplicated across sites).

- [Sheppard et al. \(2008\)](#) — Great Chagos Bank (2006): 41% hard coral cover, 0.42 km from Chagos Archipelago - Great Chagos Bank West (BITB27)
- [Spalding et al. 2025](#) (Chagos 2024 bleaching report) — Great Chagos Bank - Middle Brother, lagoon (E aspect, 1-3 m) (2024): 50% hard coral cover, 0.80 km from Chagos Archipelago - Great Chagos Bank West (BITB57)
- [XL Catlin Seaview Survey](#) — transect 36001 (2015): 6.3% hard coral cover, 1.05 km from Chagos Archipelago - Great Chagos Bank West (BIDI14)
- [XL Catlin Seaview Survey](#) — transect 36002 (2015): 25% hard coral cover, 0.26 km from Chagos Archipelago - Great Chagos Bank West (BIDI09)

- [XL Catlin Seaview Survey](#) — transect 36003 (2015): 13% hard coral cover, 0.14 km from Chagos Archipelago - Eagle Island (BIEA24.5)
- [XL Catlin Seaview Survey](#) — transect 36004 (2015): 21% hard coral cover, 0.26 km from Chagos Archipelago - Great Chagos Bank West (BITB40)

All images from [Coral Reef Diagnostics](#). Data are from Coral Reef Diagnostics and [XL Catlin Seaview Survey \(University of Queensland\)](#).



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