



Chagos Archipelago - Peros Banhos

Regional summary of 20 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.

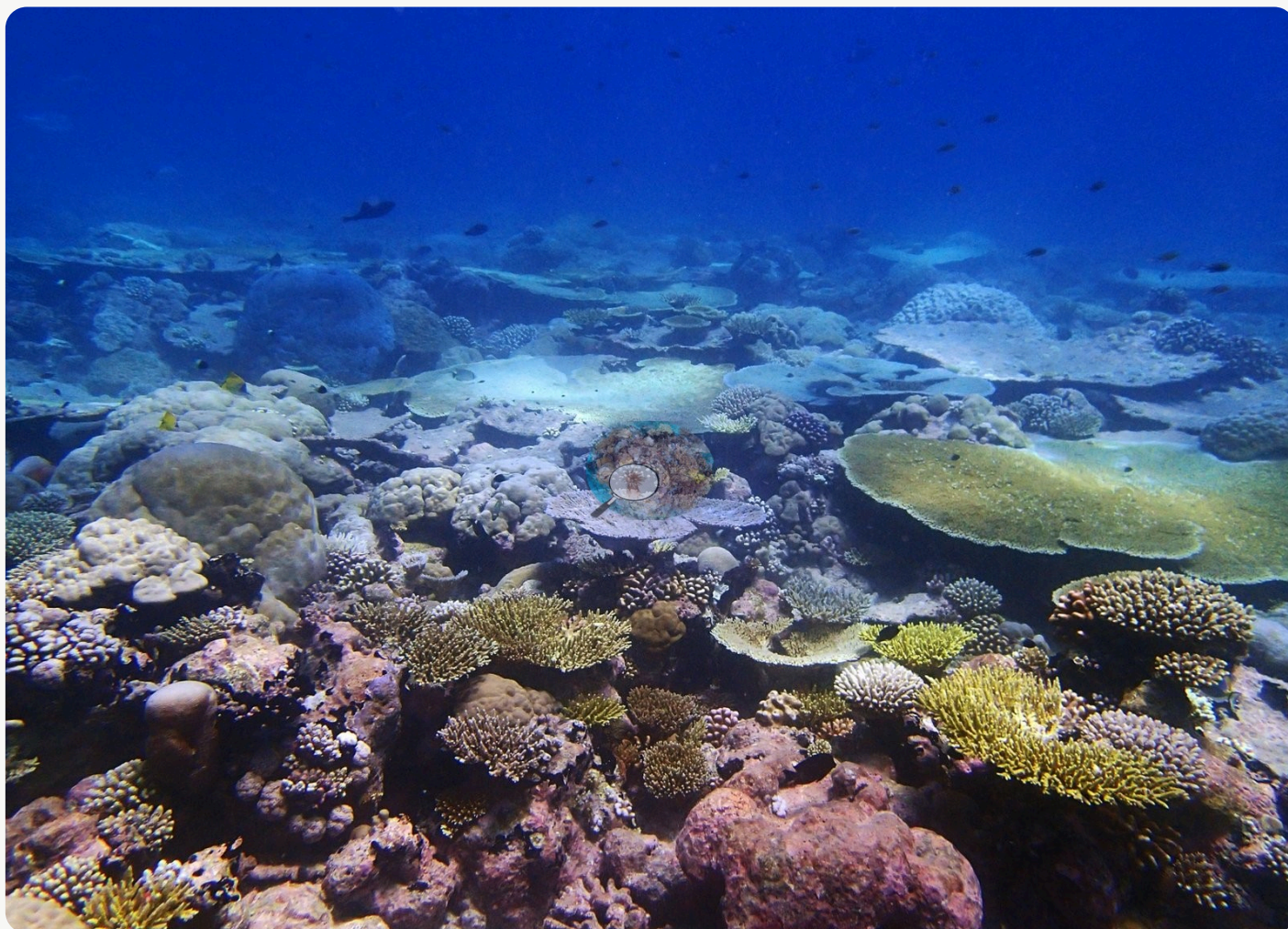


Photo: Anderson Mayfield/Coral Reef Diagnostics — [Chagos Archipelago](#) - [Peros Banhos](#) (BIPB73)

COUNTRY

**Chagos
Archipelago**

SITES

20
each linked below

HARD CORAL COVER
(REGIONAL MEAN)

47% ± 16% (std.
dev.)
n=20. range 7.0–72%

WATER TEMP. DURING
SURVEYS (REGIONAL
MEAN)

30.2°C
n = 18 of 20 sites;
surveyed Apr 2015–May

CORAL HEALTH INDEX
(REGIONAL MEAN)**2.75 / 5**n = 2 of 20 sites; 2.5 =
average (above average)CORAL BLEACHED
(REGIONAL MEAN)**13.0%**n = 19 of 20 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 levelMEAN 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

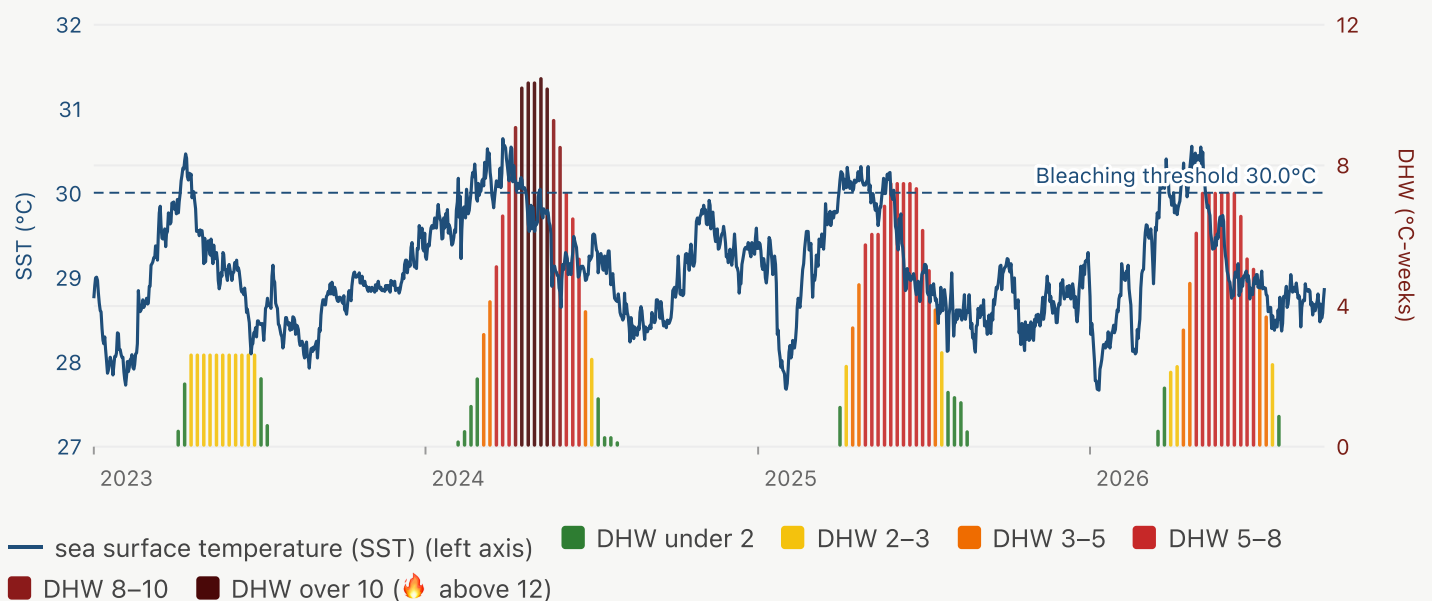
SEVERE HEAT-STRESS
YEARS**3**1985–2025 · 2 in the last
10 years

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

Peros Banhos pairs Acropora-dominated lagoon patch reefs and pinnacles with diverse, exposed outer forereefs, surveyed in April and May 2015. Repeat dives caught [bleaching](#) as it developed, climbing from 0% to 36.5% at one site in about two weeks.

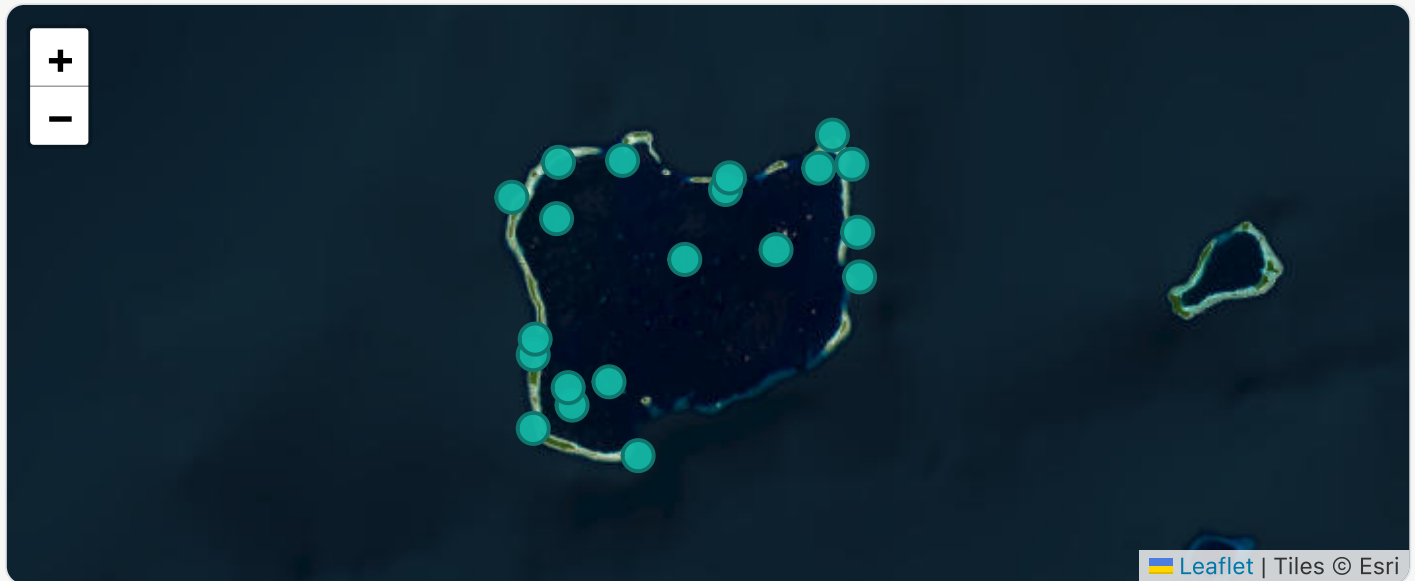
Heat stress



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 \(CSV\)](#).



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

Regional setting

Peros Banhos is one of the five true atolls of the [Chagos Archipelago](#), along with Blenheim Reef, Diego Garcia, Egmont, and Salomon ([Spalding et al. 2001](#)). Like the other northern atolls it has only small islands dotted around its rim, in contrast to the almost unbroken land rim of Diego Garcia in the south. The archipelago grew up over the volcanic track of the Réunion hotspot at the southern end of the Chagos–Laccadive Ridge, and its nearest reef neighbors, in the [Maldives](#), lie some 500 km to the north. [Spalding et al. \(2001\)](#) record about 220 scleractinian species there and describe the Chagos as a biogeographic stepping stone linking eastern and western Indian Ocean faunas. Their photograph of the Peros Banhos reef crest shows it dominated by [coralline algae](#) rather than corals, and eastern Peros Banhos was made a Strict Nature Reserve in 1998. Before 1998, corals typically occupied 50–80% of seaward and lagoon slopes to about 40 m, but that year's bleaching is estimated to have removed 80–85% of the coral on seaward reefs, on average. [Spalding et al. \(2001\)](#) estimate about 3,770 km² of reef for the archipelago as a whole, and [Souter et al. \(2021\)](#), working from a newer map, give 2,731 km² for the Chagos ecoregion.

Summarizing the 2004 regional status report, [Wilkinson \(2006\)](#) notes encouraging recovery on Chagos reefs after the 1998 mortality. The monitoring record compiled by [Souter et al. \(2021\)](#), which for this region begins with Chagos surveys in 1978, shows cover in the Chagos subregion climbing again until about 2015 and then dropping after the 2016 bleaching. Region-wide, that event wiped out over 42% of South Asia's living hard coral, and smaller, localized bleaching from 2017 to 2019 kept cover falling. The same report notes that atolls on the [Lakshadweep](#)–Maldives–

Chagos Ridge face far less human pressure than mainland coasts, that the Chagos marine protected area (MPA) is the largest of the region's atoll MPAs, and that bleaching remains the main threat. Its authors warn that repeated bleaching may now leave too little time for reefs to recover fully between events.

Overview

The 20 Peros Banhos sites span sheltered lagoonal patch reefs and pinnacles, lagoon channels, and exposed forereefs on the outer rim, surveyed between 14 April and 3 May 2015. Logged maximum depths ran from 20.9 m at [BIPB66](#) to 31.2 m at [BIPB75](#) ([BIPB69](#) and [BIPB71](#) have no logged depth). The lagoon reefs are overwhelmingly *Acropora* reefs, built of tiered table fields and staghorn thickets at [BIPB69](#), [BIPB70](#), [BIPB74](#), and [BIPB62](#), where the shallowest transect was 94% *Acropora*. Several outer forereefs break that pattern: *Porites* leads at [BIPB114](#), and massive *Porites* mounds build [BIPB75](#). At most sites cover falls with depth as the assemblage hands over from *Acropora* to *Porites*, *Echinopora*, *Favia*, or *Montipora*.

Transect coral cover ranged from 7.0% on the sand-and-rubble channel floor at [BIPB66](#) to 64.7% at [BIPB69](#). The back-reef pinnacle at [BIPB72](#) reached 72.4%, a figure best read as its richest patch rather than a site-wide mean. The windward forereefs carried the highest genus counts recorded in the unit, 31 coral genera at [BIPB114](#) and 30 at [BIPB112](#). By contrast, the channel and rim reefs at [BIPB61](#) and [BIPB66](#) are dominated by algae and turf and carry dense stands of *gorgonian* sea fans and whip corals. [BIPB76](#) holds an extensive field of intact but dead table corals coated in turf and silt, and [dead coral](#) averaged 15.7% across the transects at [BIPB71](#).

Bleaching was developing during the surveys. Published values ranged from 0.0% on [BIPB69](#)'s first dive and 0.9% at [BIPB68](#) to 38.2% at [BIPB112](#), the highest of any of the 112 Chagos stations, where meter-scale tables had gone bone-white beside pigmented neighbors. Repeat dives tracked the event. [BIPB69](#) rose from 0.0% on 16 April to 12% the next day and 36.5% by 2 May, [BIPB70](#) from 3.7% to 33.3%, and [BIPB72](#) from 10.0% to 37.5% in 13 days. Tabular *Acropora* was worst affected, while many branching stands stayed pigmented. No *crown-of-thorns* or disease was reported at the sites that recorded their absence. Wildlife included a reef *manta ray* at [BIPB66](#), gray and whitetip reef sharks, and a hawksbill turtle resting on pale tables at [BIPB74](#).

Highlights

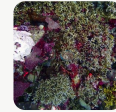
- [BIPB68](#): a gentle slope of unbroken staghorn thickets stacked with meter-wide [table corals](#), at 55.0% cover and 0.9% bleaching



- [BIPB62](#): 59.6% cover carried by *Acropora* and plate-forming *Echinopora*, with *Porites* nearly absent



- [BIPB112](#) recorded the highest published bleaching of any Chagos station (38.2%)



- Repeat dives at [BIPB69](#), [BIPB70](#) and [BIPB72](#) caught bleaching rising by roughly 27 to 36 points within about two weeks



- Windward forereefs [BIPB114](#) and [BIPB112](#) carry 31 and 30 coral genera



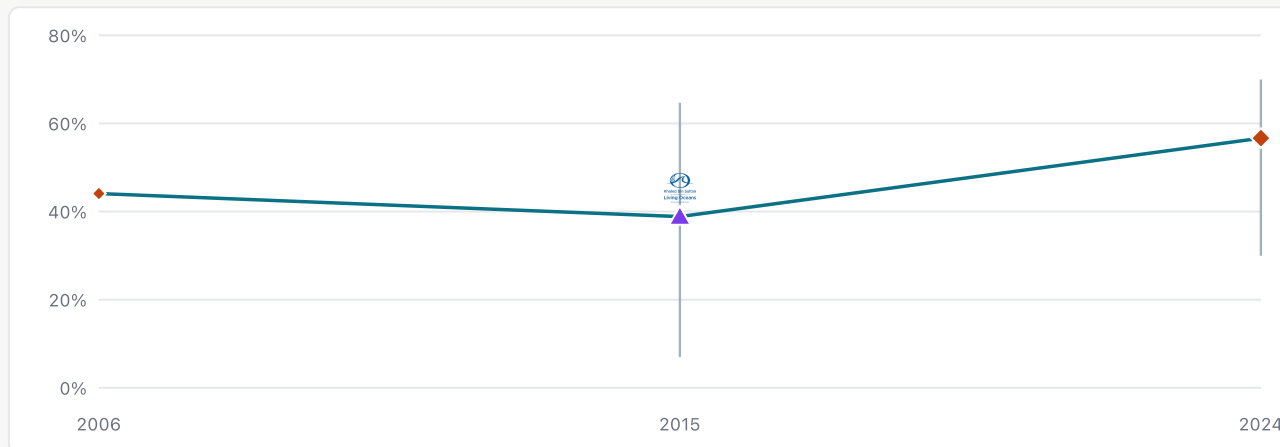
- Dense gorgonian sea fan and whip coral stands on the channel slopes at [BIPB61](#) and [BIPB66](#)



► Notable observations (12)

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. Two values above 70% were excluded as best-patch figures rather than site means. Years resting on fewer than three values are drawn as smaller points (2006). 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 (20)

% coral cover by method

Pooled across 104 dive sites

Method	Mean % coral cover	Std. dev. between dive sites	n dive sites	Note
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

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

- [Sheppard et al. \(2008\)](#) — Peros Banhos (2006): 44% hard coral cover, 2.60 km from Chagos Archipelago - Peros Banhos (BIPB60)
- [Spalding et al. 2025](#) (Chagos 2024 bleaching report) — Peros Banhos - West Ile Bois Mangué, lagoon (N, 2-6 m) (2024): 30% hard coral cover, 0.44 km from Chagos Archipelago - Peros Banhos (BIPB73)
- [Spalding et al. 2025](#) (Chagos 2024 bleaching report) — Peros Banhos - West Ile Bois Mangué, ocean (N, 7-10 m) (2024): 70% hard coral cover, 0.44 km from Chagos Archipelago - Peros Banhos (BIPB73)
- [Spalding et al. 2025](#) (Chagos 2024 bleaching report) — Peros Banhos - lagoon Knoll (N, 6-9 m) (2024): 70% hard coral cover, 1.91 km from Chagos Archipelago - Peros Banhos (BIPB63)

- [Spalding et al. 2025](#) (Chagos 2024 bleaching report) — Peros Banhos - lagoon Knoll (N, 9-12 m) (2024): 80% hard coral cover, 1.91 km from Chagos Archipelago - Peros Banhos (BIPB63)
- [XL Catlin Seaview Survey](#) — transect 36005 (2015): 20% hard coral cover, 1.50 km from Chagos Archipelago - Peros Banhos (BIPB64)
- [XL Catlin Seaview Survey](#) — transect 36006 (2015): 27% hard coral cover, 3.25 km from Chagos Archipelago - Peros Banhos (BIPB62)
- [XL Catlin Seaview Survey](#) — transect 36007 (2015): 29% hard coral cover, 3.34 km from Chagos Archipelago - Peros Banhos (BIPB65)
- [XL Catlin Seaview Survey](#) — transect 36008 (2015): 21% hard coral cover, 3.00 km from Chagos Archipelago - Peros Banhos (BIPB71)
- [XL Catlin Seaview Survey](#) — transect 36009 (2015): 21% hard coral cover, 2.03 km from Chagos Archipelago - Peros Banhos (BIPB71)
- [XL Catlin Seaview Survey](#) — transect 36010 (2015): 26% hard coral cover, 1.38 km from Chagos Archipelago - Peros Banhos (BIPB71)
- [XL Catlin Seaview Survey](#) — transect 36011 (2015): 21% hard coral cover, 0.16 km from Chagos Archipelago - Peros Banhos (BIPB76)
- [XL Catlin Seaview Survey](#) — transect 36012 (2015): 26% hard coral cover, 1.88 km from Chagos Archipelago - Peros Banhos (BIPB75)

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



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