



Chagos Archipelago - Egmont / Danger Island / Cauvin Bank



Regional summary of 9 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](#) - Egmont (BIEG05)

COUNTRY

**Chagos
Archipelago**

SITES

9
each linked below

HARD CORAL COVER
(REGIONAL MEAN)

36% ± 13% (std.
dev.)
n=9. range 4.6–48%

WATER TEMP. DURING
SURVEYS (REGIONAL
MEAN)

29.3°C
n = 8 of 9 sites;
surveyed Mar 2015



CORAL HEALTH INDEX (REGIONAL MEAN)

3.00 / 5

n = 1 of 9 sites; 2.5 =
average (above average)

CORAL BLEACHED (REGIONAL MEAN)

7.9%

n = 8 of 9 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

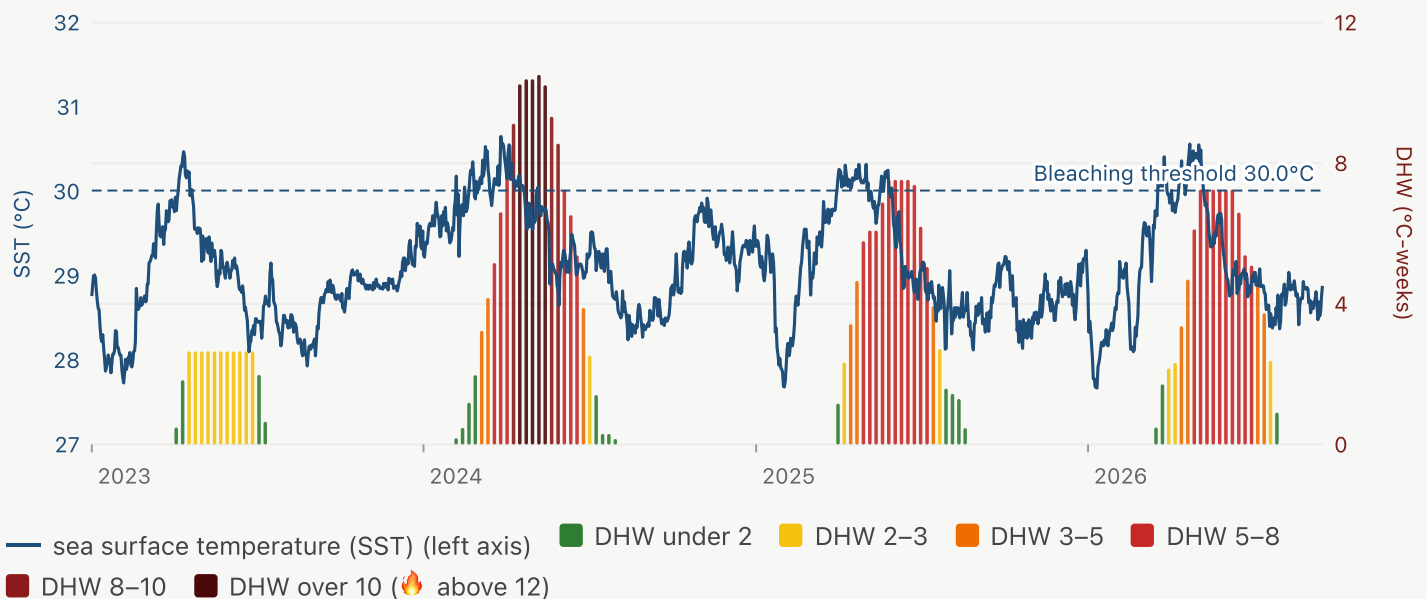
1985–2025 · 2 in the last
10 years

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

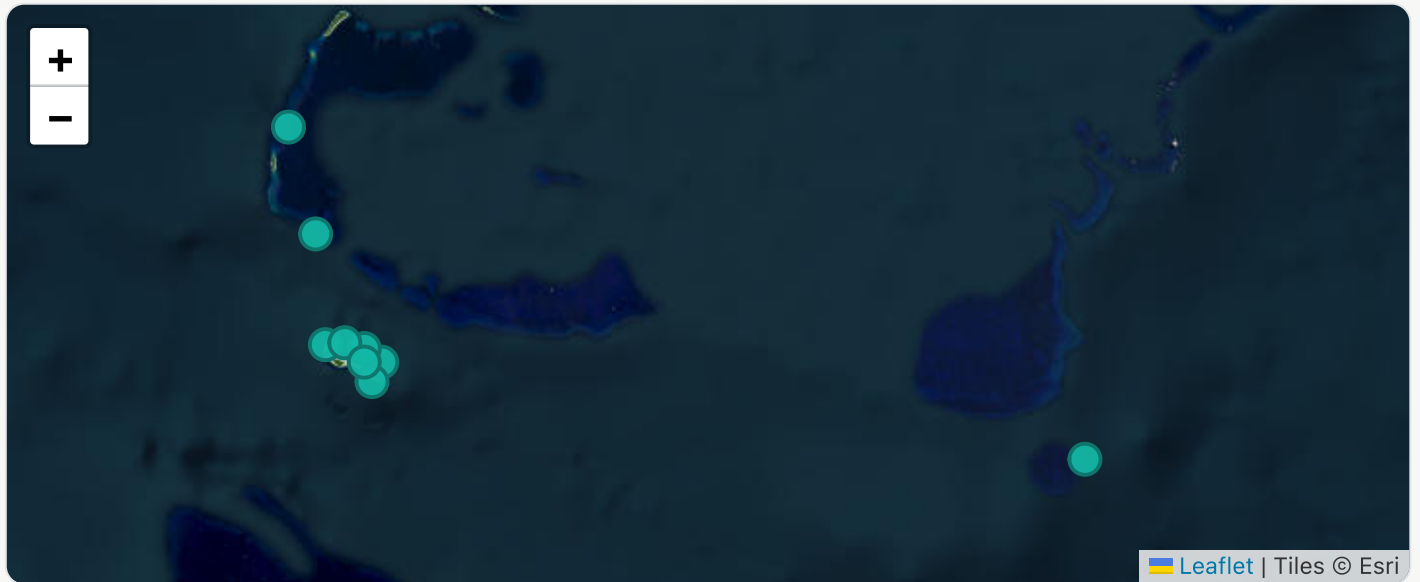
Egmont atoll's reefs, two Danger Island stations, and outlying Cauvin Bank were dived in March 2015, while [bleaching](#) was still building. One Egmont dive captured the whole sequence on tabular corals, from healthy tissue through bleaching to freshly dead, algae-covered skeleton.

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 $29.0^{\circ}\text{C} + 1^{\circ}\text{C}$). $\text{DHW} \geq 4$: 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 \(CSV\)](#).



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

Regional setting

Egmont is one of the five true atolls of the [Chagos Archipelago](#) ([Spalding et al. 2001](#)). The atlas map places it just southwest of the Great Chagos Bank, with Danger Island on the bank's western rim and Cauvin Bank at its southeastern edge. The Great Chagos Bank itself is a mostly submerged atoll and, at about 13,000 km², the world's largest atoll structure, and Danger Island was declared a Strict Nature Reserve in 1998. The archipelago formed over the volcanic trace of the Réunion hotspot and is the newest, southernmost section of the Chagos–Laccadive Ridge. It is also remote, some 500 km from the [Maldives](#) and more than 1,500 km from [Sri Lanka](#). With about 220 scleractinian species, its reefs rank among the most diverse in the Indian Ocean. They include *Ctenella chagius*, the only living member of the family Meandrinidae in the Indo-Pacific, which may be restricted to the Chagos. [Spalding et al. \(2001\)](#) report coral cover of typically 50–80% on seaward and lagoon slopes before 1998, and an estimated average loss of 80–85% on seaward reefs during that year's bleaching. They estimate about 3,770 km² of reef across the whole archipelago, and [Souter et al. \(2021\)](#) give 2,731 km² for the Chagos ecoregion.

The earliest monitoring data in the South Asia analysis of [Souter et al. \(2021\)](#) come from the Chagos in 1978, and the subregion's record shows coral cover recovering from the 1998 losses until about 2015, then falling after the 2016 bleaching. Across South Asia, that event killed more than 42% of living hard coral, and localized bleaching from 2017 to 2019 extended the decline. The authors warn that repeated bleaching may leave reefs too little time to recover between events, although atoll reefs along the ridge have rebounded better than mainland ones. With restricted access and the region's largest marine protected area (MPA), the Chagos face little local human

pressure, and bleaching is the main threat. Earlier, [Wilkinson \(2006\)](#), summarizing the 2004 status report, had noted encouraging recovery in the Chagos after 1998.

Overview

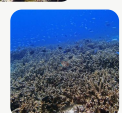
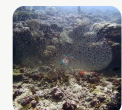
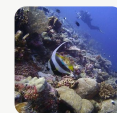
This unit covers Egmont atoll, two Danger Island stations and the outlying Cauvin Bank, surveyed between 9 and 14 March 2015 on the earliest leg of the expedition. Logged maximum depths ran from 11.0 m at [BIEG07](#) to 30.5 m at [BIEG04](#). The six Egmont sites carry 29.2% ([BIEG04](#)) to 47.5% ([BIEG07](#)) coral cover. Where coral is alive at [BIEG04](#) it is almost entirely [Acropora](#). [BIEG05](#) (46.7%) is built largely of tabular [Acropora](#). [BIEG07](#) holds a richly mixed small-scale community, including a huge, fully pigmented brain-coral boulder.

The two Danger Island stations differ sharply. [BIDI11](#), a forereef outside the lagoon at 23 m, had only four coral genera on its single short transect, with [Porites](#) making up three-quarters of its 40% coral and algae at just 21.0%. [BIDI16.5](#) is the bleaching site of the Danger Island set, with strongly mottled [Pocillopora](#) colonies (19.7% bleached). Cauvin Bank is a separate, outlying bank about 114 km from the other sites in the unit, not part of Egmont's reef system. Its single site, [BICA01](#), has the second-lowest coral cover of all 112 Chagos stations (4.6%), above only [BIDI12](#) on the Great Chagos Bank. Its corals are a thin but unusually diverse and evenly mixed veneer on open ground, with a third of the bottom bare and no bleaching recorded.

The Egmont dives came before the 2015 bleaching had fully developed. Across a temperature span of 28.9 to 30.0°C, published values rose from 0.5% at [BIEG04](#), a clean pre-event baseline, to 18.3% at [BIEG07](#), the warmest site. Branching [Acropora](#) and [Pocillopora](#) whitened first while massive corals stayed pigmented. A single dive at [BIEG05](#) recorded the full sequence on tabular [Acropora](#), from healthy tissue through partial and full bleaching to freshly dead, algae-overgrown skeleton. At [BIEG06](#) new coral recruits were settling on dead framework. A crown-of-thorns starfish was photographed beside a collection tool at [BIEG02](#), along with two [Culcita](#) cushion stars. Silvertip and gray reef sharks were seen at several Egmont sites, and [BIEG04](#) held a bait ball of thousands of small silver fish.

Highlights

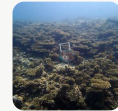
- [BIEG05](#) recorded the full bleaching sequence on tabular [Acropora](#) in a single dive
- Egmont's 28.9–30.0°C span lined up with bleaching from 0.5% ([BIEG04](#)) to 18.3% ([BIEG07](#))
- New coral recruits settling on dead branching framework beside pale [Acropora](#) plains ([BIEG06](#))



- [BIDI11](#): only four coral genera, with *Porites* making up three-quarters of its 40% coral
- Cauvin Bank ([BICA01](#)), an outlying bank about 114 km away, has the second-lowest cover of all 112 Chagos stations (4.6%)



- Silvertip and gray reef sharks at Egmont, and a bait ball of thousands of fish at [BIEG04](#)



Notable observations

- [Chagos Archipelago - Egmont \(BIEG02\)](#): Crown-of-thorns starfish unambiguously present, photographed alongside a stainless steel bone-rongeur laid beside it; two *Culcita* cushion stars. Bleaching 3.6% as a tight cluster of fully white *Acropora*; one large dead, algae-covered *Porites* read as recent mortality.



- [Chagos Archipelago - Egmont \(BIEG03\)](#): Four to five fully bleached branching *Acropora* colonies in one frame (site figure 4.0%).



- [Chagos Archipelago - Egmont \(BIEG05\)](#): Bleaching 6.5%: a completely bleached *Pocillopora*, and tabular *Acropora* showing healthy, partially bleached, wholly bleached, freshly dead, and CCA-overgrown stages on one dive.



- [Chagos Archipelago - Egmont \(BIEG06\)](#): Bleaching 10.4%: widespread pale, washed-out *Acropora* plains, colonies with bone-white branch tips, and standing dead branching framework colonized by algae; new recruits on dead substrate.



- [Chagos Archipelago - Egmont \(BIEG07\)](#): Bleaching 18.3%; bleaching or paling on branching *Acropora* and *Pocillopora* in three of eight frames.



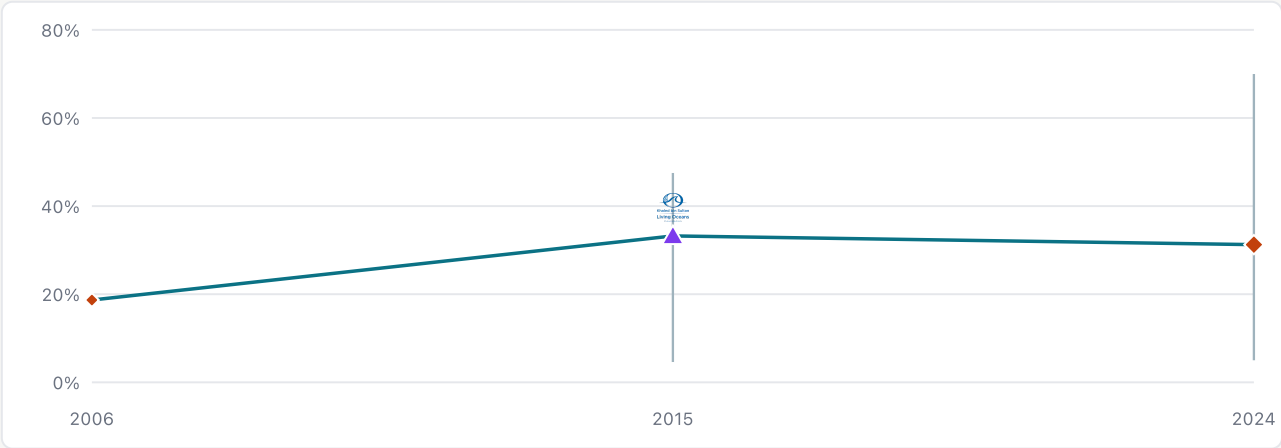
- [Chagos Archipelago - Danger Island \(BIDI16.5\)](#): Bleaching 19.7%: several *Pocillopora* colonies strongly mottled with bone-white branch clusters; pale patches on massive *Porites* more likely partial mortality or older die-off.



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. Four 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

- [Chagos Archipelago - Cauvin Banks \(BICA01\)](#) — 4.6% coral cover
- [Chagos Archipelago - Danger Island \(BIDI11\)](#) — 40% coral cover
- [Chagos Archipelago - Danger Island \(BIDI16.5\)](#) — 46% coral cover
- [Chagos Archipelago - Egmont \(BIEG02\)](#) — 32% coral cover
- [Chagos Archipelago - Egmont \(BIEG03\)](#) — 37% coral cover
- [Chagos Archipelago - Egmont \(BIEG04\)](#) — 29% coral cover
- [Chagos Archipelago - Egmont \(BIEG05\)](#) — 47% coral cover
- [Chagos Archipelago - Egmont \(BIEG06\)](#) — 44% coral cover
- [Chagos Archipelago - Egmont \(BIEG07\)](#) — 48% coral cover

% 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

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

- [Sheppard et al. \(2008\)](#) — Egmont (2006): 19% hard coral cover, 1.01 km from Chagos Archipelago - Egmont (BIEG05)
- [Spalding et al. 2025](#) (Chagos 2024 bleaching report) — Egmont Manta Alley (ocean, NE aspect, 2-5 m) (2024): 5.0% hard coral cover, 0.34 km from Chagos Archipelago - Egmont (BIEG04)
- [Spalding et al. 2025](#) (Chagos 2024 bleaching report) — Egmont Manta Alley (ocean, NE aspect, 5-8 m) (2024): 80% hard coral cover, 0.34 km from Chagos Archipelago - Egmont (BIEG04)
- [Spalding et al. 2025](#) (Chagos 2024 bleaching report) — Egmont Manta Alley (ocean, NE aspect, 8-10 m) (2024): 80% hard coral cover, 0.34 km from Chagos Archipelago - Egmont (BIEG04)
- [Spalding et al. 2025](#) (Chagos 2024 bleaching report) — Egmont Outer reef North (ocean, N aspect, 5-8 m) (2024): 80% hard coral cover, 1.46 km from Chagos Archipelago - Egmont (BIEG06)
- [Spalding et al. 2025](#) (Chagos 2024 bleaching report) — Egmont Outer reef North (ocean, N aspect, 8-10 m) (2024): 80% hard coral cover, 1.46 km from Chagos Archipelago - Egmont (BIEG06)
- [Spalding et al. 2025](#) (Chagos 2024 bleaching report) — Egmont West (ocean, W aspect, 12-15 m) (2024): 20% hard coral cover, 0.66 km from Chagos Archipelago - Egmont (BIEG05)
- [Spalding et al. 2025](#) (Chagos 2024 bleaching report) — Egmont West (ocean, W aspect, 7-10 m) (2024): 30% hard coral cover, 0.66 km from Chagos Archipelago - Egmont (BIEG05)

- [Spalding et al. 2025](#) (Chagos 2024 bleaching report) — Egmont, NW Lagoon (lagoon, S aspect, 2-3 m) (2024): 70% hard coral cover, 1.16 km from Chagos Archipelago - Egmont (BIEG06)
- [XL Catlin Seaview Survey](#) — transect 36028 (2015): 11% hard coral cover, 2.17 km from Chagos Archipelago - Egmont (BIEG03)
- [XL Catlin Seaview Survey](#) — transect 36029 (2015): 29% hard coral cover, 1.94 km from Chagos Archipelago - Egmont (BIEG07)

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



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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. [\[PDF\]](#)
- Mayfield AB, Dempsey AC (2026). Using tourist diver images to estimate coral cover and bleaching prevalence in a remote Indian Ocean coral reef system. *Oceans* 7(1):1. [PDF](#)
- Sheppard C, Harris A, Sheppard A (2008). Archipelago-wide coral recovery patterns since 1998 in the Chagos Archipelago, central Indian Ocean. *Marine Ecology Progress Series* 362:109-117. [PDF](#)
- Spalding M, Bourasseau M, et al. (2025). Coral bleaching and mortality in the Chagos Archipelago, 2024. British Indian Ocean Territory Administration report (gray literature). [PDF](#)