# Tonga - Ha'apai (TOHA22)

surveyed 2013-09-18




0 — 5

**Coral Health Index: TBD**

**What was done.** Coral cover here was measured on in-situ benthic transects run by divers on the Living Oceans Foundation Global Reef Expedition over 5 transects — a diver measurement, not an estimate read off photographs. The written account of the site is a review of its photographs (24 frames), the author's sampling sheet, and the expedition's survey records, not a second survey.

HARD CORAL COVER
**40%**
Benthic transects+photo-quadrats

MOST RECENT HEAT LOAD RECORD
**24.3°C** **0.0°C-weeks**
26 Oct 2026 · -2.5°C vs the past-365-day mean (26.8°C) · NOAA No heat stress

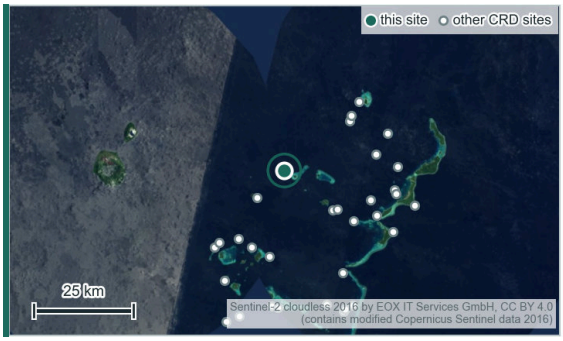
HEAT STRESS (5-YR MEAN ANNUAL MAX. DHW)
**8.1°C-weeks**
NOAA annual peaks averaging 8–12°C-weeks

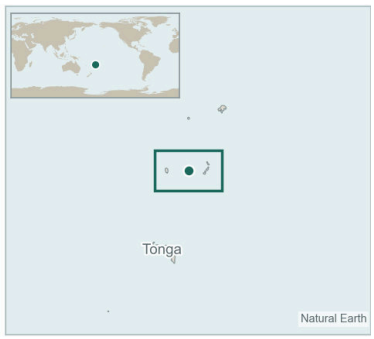
MAX. DEPTH
**23.2 m**
dive-log maximum

WATER TEMP. (SURVEY)
**25.3°C**
CTD-cast midpoint of 24.6–26.0°C
-1.4°C vs the 2013 mean sea temperature (26.7°C)

PHOTOGRAPHS
**24 in the gallery · 24 on file**

POSITION
**-19.7542, -174.6488**
Coordinate from the supporting data of Mayfield et al. (2017, PLoS ONE).

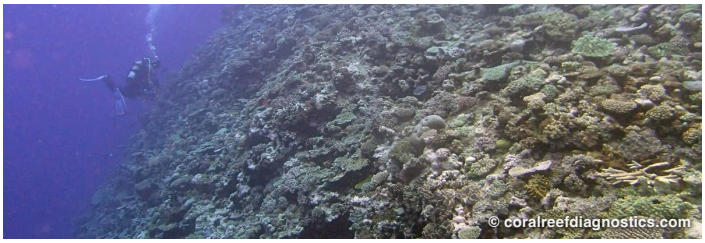



A Ha'apai station defined by its steep, near-vertical wall falling into violet-blue water, heavily textured with encrusting and plating corals and hung with schools of surgeonfish, unicornfish, and planktivores. The reef top above is a patchier mosaic of small mixed colonies and bare pavement. Surveyed on the Living Oceans Foundation's Global Reef Expedition.

**lea faka-Tonga.** Ko ha potu (station) ʻi Haʻapai ʻoku ʻiloa ʻi hono holisi tuʻu meimei hangatonu ʻoku tō hifo ki he tahi lanu vaioleti-pulū, ʻoku fonu ʻi he ngaahi feo pipiki (encrusting) mo fakapaleti (plating) pea tautau ai ʻa e ngaahi kulupu ʻo e surgeonfish, unicornfish, mo e ika kai plankton (planktivores). Ko e funga ʻo e hakau ʻi ʻolunga ko ha fefiofiofi taʻe-tatau ange ʻo e ngaahi kiʻi kulupu kehekehe mo e tuʻunga maka tukuʻau (bare pavement). *AI translation of this summary; the English is authoritative. (low confidence)*




**CV model comparison (hard coral cover, %): Transect mean (all transects) 40.4** · CoralSCOP unedited 21.3 · Claude 11.8 The two computer-vision methods differ by 9.5 pp (11.8–21.3%) and read 19.1–28.6 pp below the in-water transect (40.4%); the headline is the in-water transect because a diver transect is independent of the photographs.

Photographs: Anderson Mayfield/Coral Reef Diagnostics — 3 on this card; 24 in the gallery · 24 on file; watermarked · Full site record: https://api.coralreefdiagnostics.com/site-pages/gre-tonga-ha-apai-toha22.html · Heat stress is the mean of the latest five annual maxima of NOAA Coral Reef Watch degree-heating weeks for this reef's NOAA CRW virtual station (Southern Tonga) — a five-year heat history for the station's waters, not a measurement at this site on the dive date.