Tonga - Vava'u (TOVA37)

surveyed 2013-09-23



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 and of the author's dive notes, not a second survey.

HARD CORAL COVER

28%

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

31.7 m

dive-log maximum

WATER TEMP. (SURVEY)

26.1°C

CTD-cast midpoint of 26.0–26.2°C

-1.1°C vs the 2013 mean sea temperature (27.2°C)

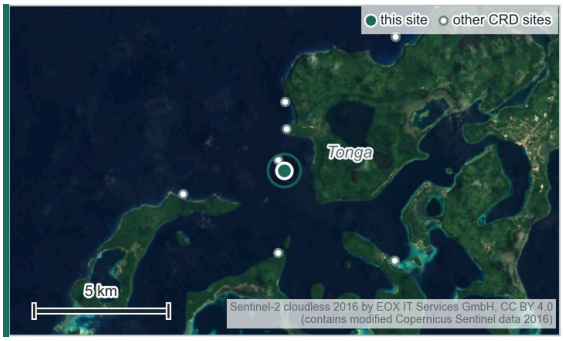
PHOTOGRAPHS

24 in the gallery · 24 on file

POSITION

-18.6610, -174.0677

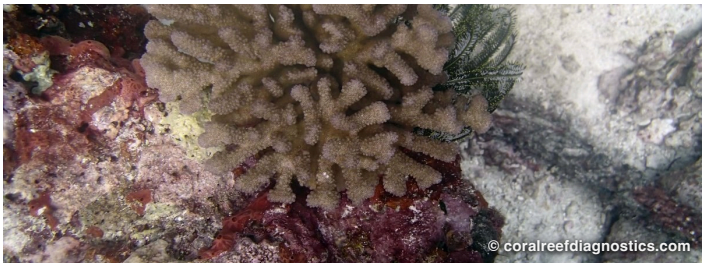
Coordinate from the supporting data of Mayfield et al. (2017, PLoS ONE).





A leeward reef behind a small Vava'u island at a channel entrance, with a large two-mouthed cave ringed by sea fans, soft corals, and sponges on its ceiling, and a second cave with black coral at the entrance. Coral cover was 28% overall; the second platform had very little coral, with snail damage and damselfish lawns, and the upper slope held piles of broken, mostly dead plating corals. Surveyed on the Living Oceans Foundation's Global Reef Expedition.

Iea faka-Tonga. Ko ha hakau ʻi he tafaʻaki maluʻi mei he matangi (leeward) ʻi he mui ʻo ha kiʻi motu ʻi Vavaʻu ʻi he hūʻanga ʻo ha hala vai (channel), mo ha ʻana lahi ʻoku ua hono ngutu ʻoku takatakaiʻi ʻe he ngaahi sea fans, feo molū (soft corals), mo e ngaahi sponge ʻi hono ʻaofi, pea mo ha ʻana hono ua ʻoku ʻi ai ʻa e feo ʻuliʻuli (black coral) ʻi he hūʻanga. Ko e ʻufiʻufi ʻe he feo (coral cover) fakakātoa naʻe 28%; naʻe siʻisiʻi ʻaupito ʻa e feo ʻi he tuʻunga (platform) hono ua, mo e maumau ʻa e ʻelele (snail damage) mo e ngaahi ngoue limu ʻa e damselfish, pea naʻe ʻi he tafaʻaki ʻi ʻolunga ha ngaahi fokotuʻunga ʻo e ngaahi feo fakapaleti (plating) kuo fasifasi, ko hono lahi kuo mate. *AI translation of this summary; the English is authoritative. (low confidence)*





CV model comparison (hard coral cover, %): Transect mean (all transects) 28.2 · CoralSCOP unedited 24.5* · Claude (edited photos) 11.9* The two computer-vision methods disagree by 12.6 pp (11.9–24.5%) and read 3.7–16.3 pp below the in-water transect (28.2%); the headline is the in-water transect because a diver transect is independent of the photographs. *Based on only 18 reef-habitat photos; this estimate is less certain.

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-vava-u-tova37.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.