Tonga - Vava'u (TOVA38)

surveyed 2013-09-24



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 6 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

41%

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

30.8 m

dive-log maximum

WATER TEMP. (SURVEY)

26.5°C

CTD-cast midpoint of 26.4–26.5°C

-0.8°C vs the 2013 mean sea temperature (27.3°C)

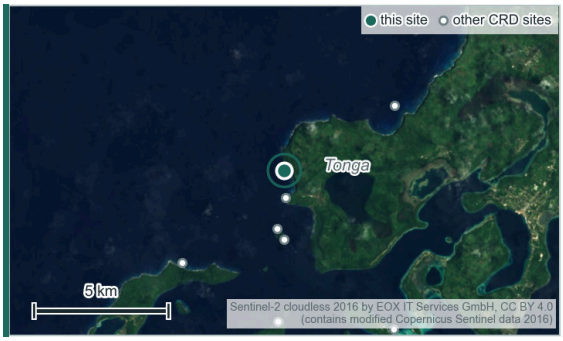
PHOTOGRAPHS

43 in the gallery · 43 on file

POSITION

-18.6380, -174.0675

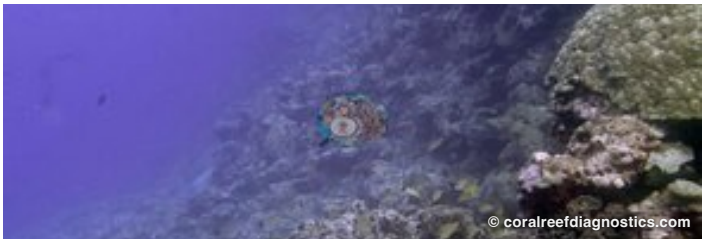
Coordinate from the supporting data of Mayfield et al. (2017, PLoS ONE).





A north-shore Vava'u reef where a terrace drops near vertically onto spurs sloping past 35 m, with a 4 m *Diploastrea* on the wall and 1-2 m massive *Porites* filling the grooves below. About 10 to 20% of branching corals showed snail damage, and many small corals had been eaten by cushion stars. Surveyed on the Living Oceans Foundation's Global Reef Expedition.

lea faka-Tonga. Ko ha hakau ʻi he matātahi tokelau ʻo Vavaʻu ʻoku tō hifo ai ha tuʻunga (terrace) meimei hangatonu ki ha ngaahi spurs ʻoku hifo ʻo laka hake ʻi he 35 m, mo ha *Diploastrea* ʻo e 4 m ʻi he holisi (wall) pea mo e *Porites* lalahi (massive) ʻo e 1-2 m ʻoku fonu ʻi he ngaahi luo (grooves) ʻi lalo. Naʻe hā ʻi he meimei 10 ki he 20% ʻo e feo fakavaʻava'a ʻa e maumau ʻa e ʻelele (snail damage), pea naʻe kai ʻe he fetuʻu tahi (cushion stars) ha ngaahi kiʻi feo lahi. *AI translation of this summary; the English is authoritative. (low confidence)*





CV model comparison (hard coral cover, %): Transect mean (all transects) 40.7 · CoralSCOP unedited 30.7 · Claude (edited photos) 30.2 The two computer-vision methods agree within 0.5 pp (30.2–30.7%) and read 10.0–10.5 pp below the in-water transect (40.7%); 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; 43 in the gallery · 43 on file; watermarked · Full site record: https://api.coralreefdiagnostics.com/site-pages/gre-tonga-vava-u-tova38.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.