Tonga - Vava'u (TOVA53)

surveyed 2013-09-28



0 — 5

Coral Health Index: 3.00/5

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, the author's sampling sheet, and the expedition's survey records, not a second survey.

HARD CORAL COVER

38%

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

29.3 m

dive-log maximum

WATER TEMP. (SURVEY)

26.1°C

CTD-cast midpoint of 26.1–26.2°C

-1.0°C vs the 2013 mean sea temperature (27.1°C)

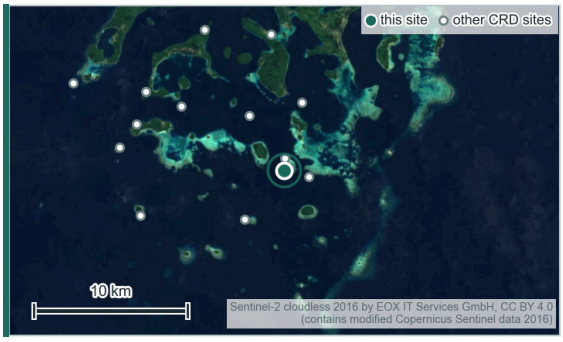
PHOTOGRAPHS

35 in the gallery · 56 on file

POSITION

-18.7705, -174.0207

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





The southwest end of Treasure Island in Vava'u, where a wide shallow terrace carries 60-80% cover of lilac, blue, and tan branching and table corals. Below 10 m the slope turns sandy and rubbly with scattered plating corals and *Halimeda* patches, and cushion stars, trumpet tritons, and sea cucumbers were counted. Surveyed on the Living Oceans Foundation's Global Reef Expedition.

lea faka-Tonga. Ko e ngata‘anga tonga hihifo ‘o Treasure Island ‘i Vava‘u, ‘a ia ‘oku ‘i ai ha tu‘unga mamaha fālahi (shallow terrace) ‘oku ‘ufi‘ufi ‘aki ‘a e 60-80% ‘e he feo fakava‘ava‘a mo fakatēpile (table) lanu laileki, pulū, mo e lanu kelekele (tan). ‘I lalo ‘i he 10 m, ‘oku ‘one‘one mo maka momoa (rubble) ‘a e tafa‘aki mo e ngaahi feo fakapaleti (plating) mavahevahe mo e ngaahi konga *Halimeda*, pea na‘e lau ‘a e fetu‘u tahi (cushion stars), ngaahi trumpet triton, mo e ngaahi loli (sea cucumbers). *AI translation of this summary; the English is authoritative. (low confidence)*





CV model comparison (hard coral cover, %): Transect mean (all transects) 37.9 · CoralSCOP unedited 38.6 · Claude (edited photos) 39.7 The two computer-vision methods agree within 1.1 pp (38.6–39.7%) and read within 1.8 pp of the in-water transect (37.9%).

Photographs: Anderson Mayfield/Coral Reef Diagnostics — 3 on this card; 35 in the gallery · 56 on file; watermarked · Full site record: https://api.coralreefdiagnostics.com/site-pages/gre-tonga-vava-u-tova53.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.