Tonga - Vava'u (TOVA44)

surveyed 2013-09-25



0 — 5

Coral Health Index: 3.46/5

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 6 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

53%

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

25.6 m

dive-log maximum

WATER TEMP. (SURVEY)

26.7°C

CTD-cast midpoint of 26.7–26.8°C

-0.5°C vs the 2013 mean sea temperature (27.2°C)

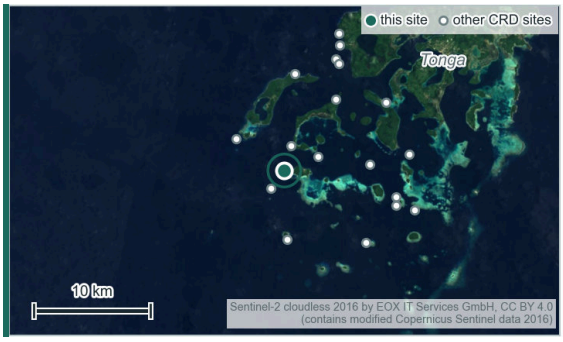
PHOTOGRAPHS

15 in the gallery · 50 on file

POSITION

-18.7434, -174.1119

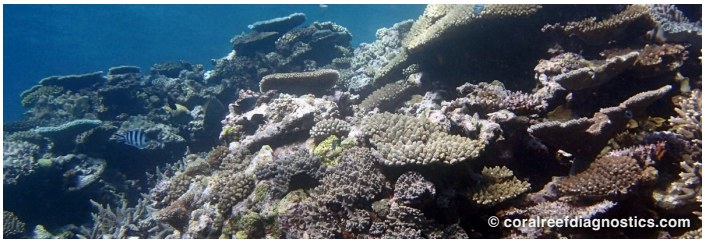
Coordinate from the supporting data of Mayfield et al. (2017, PLoS ONE).





A lagoon fringing reef in Vava'u with a shallow platform of very dense, multi-layered table and staghorn *Acropora* that drops vertically onto overlapping plating corals. At the base lie piles of broken, dead plates and rubble, and 20-30% of the table corals were dead in place, with some showing large white lesions. Surveyed on the Living Oceans Foundation's Global Reef Expedition.

lea faka-Tonga. Ko ha hakau matafonua ʻi he namo (lagoon fringing reef) ʻi Vavaʻu mo ha tuʻunga mamaha (shallow platform) ʻo e *Acropora* fakatēpile (table) mo e staghorn fefuʻifuʻi ʻaupito mo fakalaulau (multi-layered) ʻoku tō hifo hangatonu ki he ngaahi feo fakapaleti (plating corals) ʻoku fetaulaki. ʻI he takele ʻoku ʻi ai ʻa e ngaahi fokotuʻunga ʻo e ngaahi papa mate kuo fasifasi mo e maka momoa (rubble), pea ko e 20-30% ʻo e ngaahi feo fakatēpile naʻe mate ʻi hono tuʻuʻanga, mo ha niʻihi naʻe ʻi ai ʻa e ngaahi lavea hinehina lalahi (white lesions). *AI translation of this summary; the English is authoritative. (low confidence)*





CV model comparison (hard coral cover, %): Transect mean (all transects) 53.5 · CoralSCOP unedited 40.0* · Claude (edited photos) 31.8* The two computer-vision methods differ by 8.2 pp (31.8–40.0%) and read 13.5–21.7 pp below the in-water transect (53.5%); the headline is the in-water transect because a diver transect is independent of the photographs. *Based on only 15 reef-habitat photos; this estimate is less certain.

Photographs: Anderson Mayfield/Coral Reef Diagnostics — 3 on this card; 15 in the gallery · 50 on file; watermarked · Full site record: https://api.coralreefdiagnostics.com/site-pages/gre-tonga-vava-u-tova44.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.