Tonga - Vava'u (TOVA52)

surveyed 2013-09-28



0 — 5

Coral Health Index: 2.49/5

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

47%

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

29.0 m

dive-log maximum

WATER TEMP. (SURVEY)

26.2°C

CTD-cast midpoint; the cast read 26.2°C throughout

-0.9°C vs the 2013 mean sea temperature (27.1°C)

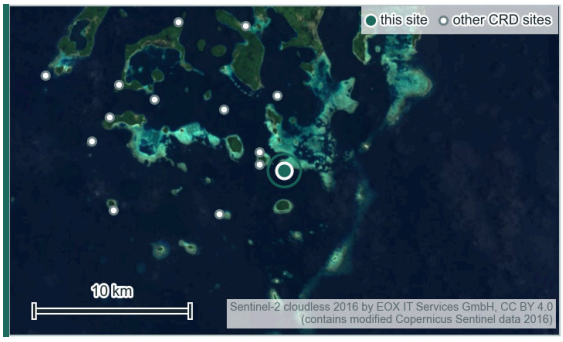
PHOTOGRAPHS

16 in the gallery · 54 on file

POSITION

-18.7740, -174.0054

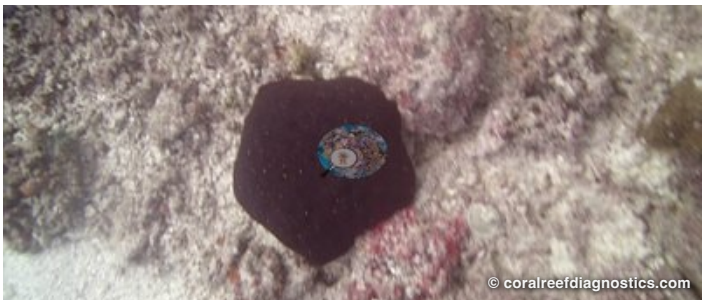
Coordinate from the supporting data of Mayfield et al. (2017, PLoS ONE).





A structurally three-dimensional Vava'u slope dived to 29 m, where *Acropora* tables stand clear of dark undercut bases and staghorn clumps grow among them. Cushion stars and a dense school of damselfish add life to the scene. Surveyed on the Living Oceans Foundation's Global Reef Expedition.

lea faka-Tonga. Ko ha tafa‘aki ‘i Vava‘u ‘oku mo‘oni hono fōtunga fakatu‘unga tolu (three-dimensional), na‘e uku ki he 29 m, ‘a ia ‘oku tu‘u mahu‘i hake ai ‘a e ngaahi tēpile *Acropora* mei honau ngaahi tefito ‘uli‘uli kuo keli ‘i lalo (undercut), pea ‘oku tupu ‘a e ngaahi pupunga staghorn ‘i honau vaha‘a. ‘Oku tānaki ki he mo‘ui ‘o e feitu‘u ‘a e ngaahi fetu‘u tahi (cushion stars) mo ha ‘ao matolu ‘o e damselfish. *AI translation of this summary; the English is authoritative. (low confidence)*





CV model comparison (hard coral cover, %): Transect mean (all transects) 46.7 · CoralSCOP unedited 43.0* · Claude 43.2* The two computer-vision methods agree within 0.2 pp (43.0–43.2%) and read within 3.7 pp of the in-water transect (46.7%). *Based on only 17 reef-habitat photos; this estimate is less certain.

Photographs: Anderson Mayfield/Coral Reef Diagnostics — 3 on this card; 16 in the gallery · 54 on file; watermarked · Full site record: https://api.coralreefdiagnostics.com/site-pages/gre-tonga-vava-u-tova52.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.