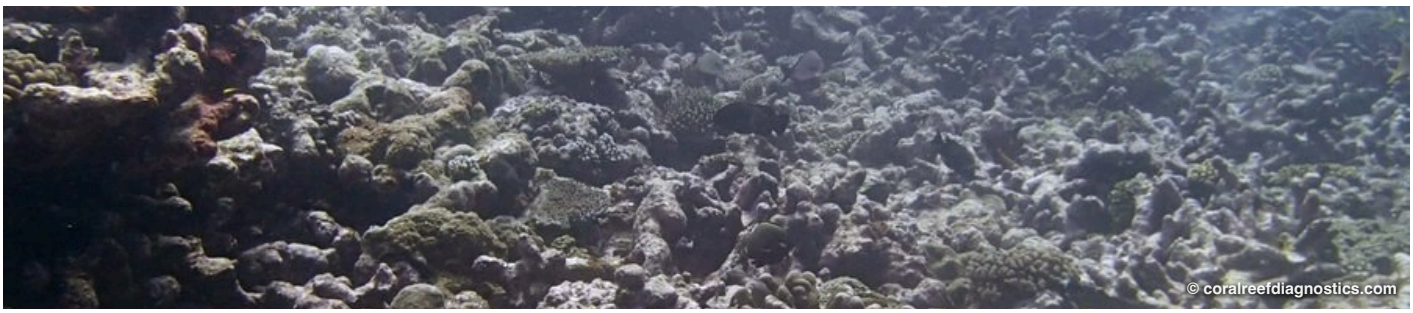
Tonga - Niua (TONI54)

surveyed 2013-09-29



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

34%

Benthic transects+photo-quadrats

MOST RECENT HEAT LOAD RECORD

26.2°C **0.0°C-weeks**

26 Oct 2026 · -2.2°C vs the past-365-day mean (28.4°C) · NOAA No heat stress

HEAT STRESS (5-YR MEAN ANNUAL MAX. DHW)

5.2°C-weeks

NOAA annual peaks averaging 4–8°C-weeks

MAX. DEPTH

32.9 m

dive-log maximum

WATER TEMP. (SURVEY)

27.7°C

CTD-cast midpoint of 27.7–27.8°C

-0.7°C vs the 2013 mean sea temperature (28.4°C)

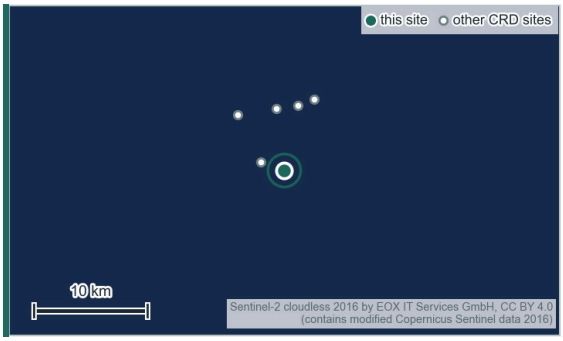
PHOTOGRAPHS

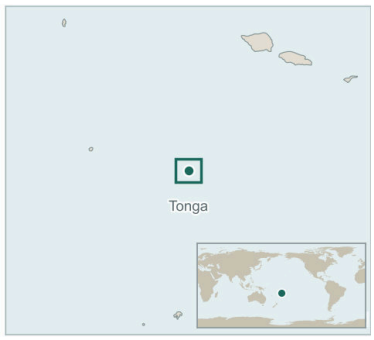
16 in the gallery · 26 on file

POSITION

-15.9819, -173.7913

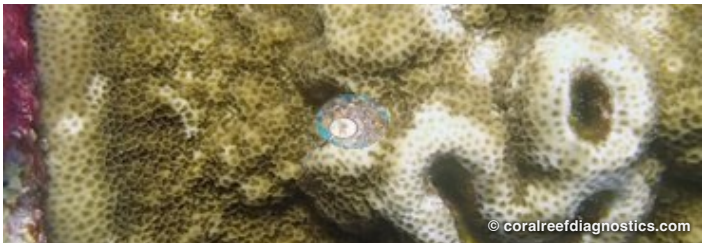
Survey coordinate from the expedition's records.





A south-facing fringing reef off Niuatoputapu's southern tip, side-on to the trades (intermediate exposure), that slopes very gently to 25 m. About 30% of the corals were dead, including a large stand of staghorn at 15 m, and diseased *Pocillopora* were numerous. Surveyed on the Living Oceans Foundation's Global Reef Expedition.

lea faka-Tonga. Ko ha hakau matafonua (fringing reef) ‘oku hanga ki he tonga ‘i he mu‘a tonga ‘o Niuatoputapu, ‘oku tu‘u fakatafa‘aki ki he matangi tokelau-hahake (trade winds) (fakaloto ‘a e fehangahangai mo e matangi), ‘oku hifo māmālie ‘aupito ki he 25 m. Na‘e mate ‘a e meimei 30% ‘o e ngaahi feo, kau ai ha vao staghorn lahi ‘i he 15 m, pea na‘e lahi ‘a e *Pocillopora* na‘e puke (diseased). *AI translation of this summary; the English is authoritative. (low confidence)*





CV model comparison (hard coral cover, %): Transect mean (all transects) 34.3 · CoralSCOP unedited 34.2* · Claude 20.1* The two computer-vision methods disagree by 14.1 pp (20.1–34.2%) and read 0.1–14.2 pp below the in-water transect (34.3%); the headline is the in-water transect because a diver transect is independent of the photographs. *Based on only 13 reef-habitat photos; this estimate is less certain.

Photographs: Anderson Mayfield/Coral Reef Diagnostics — 3 on this card; 16 in the gallery · 26 on file; watermarked · Full site record: https://api.coralreefdiagnostics.com/site-pages/gre-tonga-niua-toni54.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 (Northern Tonga) — a five-year heat history for the station's waters, not a measurement at this site on the dive date.