

## M 6.1, 97km ENE of 'Ohonua, Tonga

Origin Time: 2019-06-15 21:56:09 UTC (Sat 09:56:09 local)

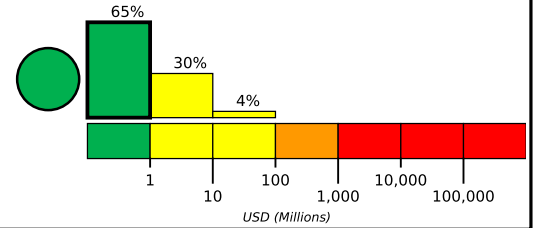
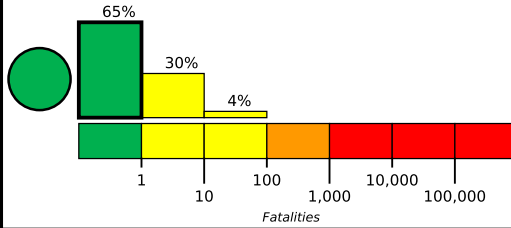
Location: 21.1421° S 174.0319° W Depth: 10.0 km

Created: 2 hours, 1 minute after earthquake

### Estimated Fatalities

Green alert for shaking-related fatalities and economic losses. There is a low likelihood of casualties and damage.

### Estimated Economic Losses

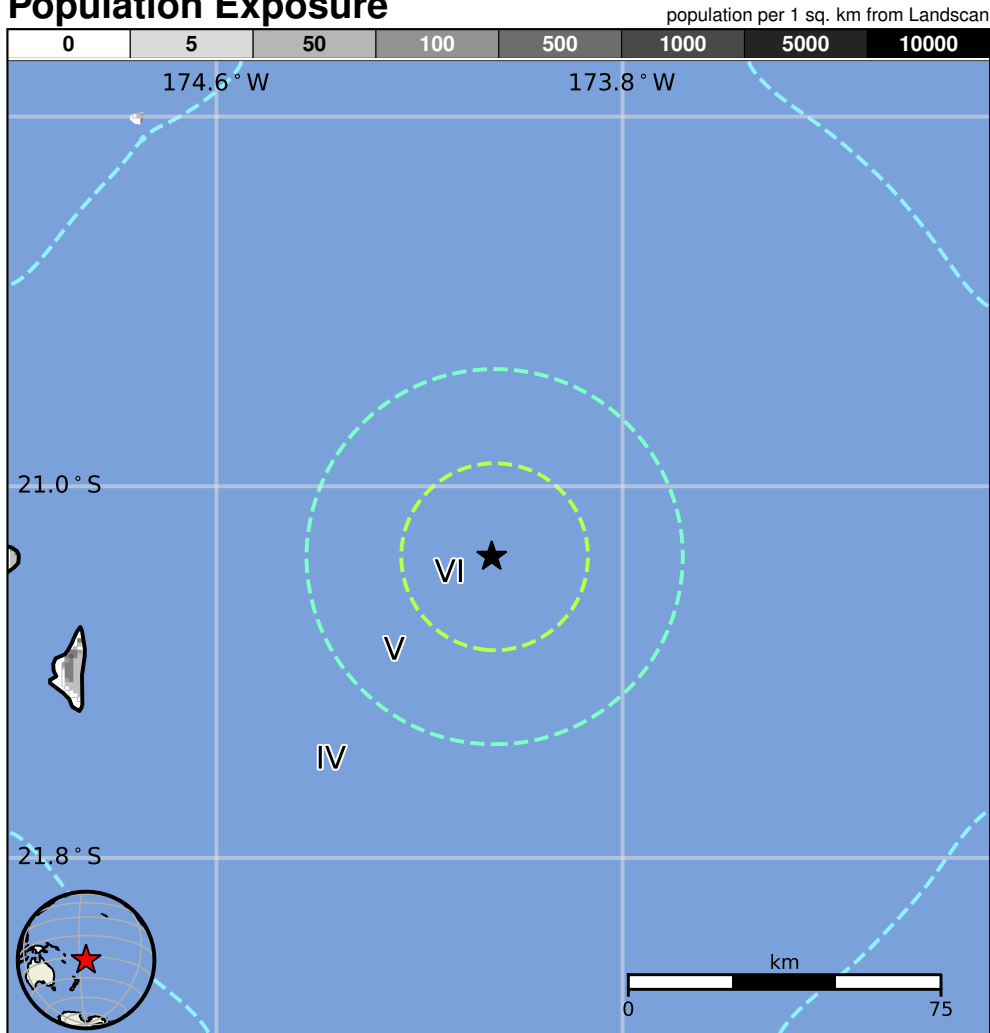


### Estimated Population Exposed to Earthquake Shaking

| ESTIMATED POPULATION EXPOSURE (k=x1000) | —*                    | —*     | 10k   | 0        | 0        | 0           | 0          | 0          | 0        |
|-----------------------------------------|-----------------------|--------|-------|----------|----------|-------------|------------|------------|----------|
| ESTIMATED MODIFIED MERCALLI INTENSITY   | I                     | II-III | IV    | V        | VI       | VII         | VIII       | IX         | X+       |
| PERCEIVED SHAKING                       | Not felt              | Weak   | Light | Moderate | Strong   | Very Strong | Severe     | Violent    | Extreme  |
| POTENTIAL DAMAGE                        | Resistant Structures  | None   | None  | None     | V. Light | Light       | Moderate   | Mod./Heavy | Heavy    |
|                                         | Vulnerable Structures | None   | None  | None     | Light    | Moderate    | Mod./Heavy | Heavy      | V. Heavy |

\*Estimated exposure only includes population within the map area.

### Population Exposure



### Structures

Overall, the population in this region resides in structures that are highly vulnerable to earthquake shaking, though some resistant structures exist. The predominant vulnerable building types are unknown/miscellaneous types and wood construction.

### Historical Earthquakes

| Date (UTC) | Dist. (km) | Mag. | Max MMI(#) | Shaking Deaths |
|------------|------------|------|------------|----------------|
| 1977-06-22 | 264        | 8.0  | VII(47k)   | 0              |
| 1983-03-21 | 135        | 6.7  | VII(53k)   | —              |
| 2006-05-03 | 110        | 8.0  | VIII(7k)   | 0              |

### Selected City Exposure

from GeoNames.org

| MMI | City    | Population |
|-----|---------|------------|
| IV  | 'Ohonua | 1k         |

bold cities appear on map.

(k = x1000)

PAGER content is automatically generated, and only considers losses due to structural damage.

Limitations of input data, shaking estimates, and loss models may add uncertainty.

<https://earthquake.usgs.gov/earthquakes/eventpage/us60004177#pager>

Event ID: us60004177