## 'Hunga Tonga-Hunga Ha'apai' volcanic eruption

The volcano, which previously erupted in 2009 and 2014,

According to preliminary estimates from NASA, the amount of energy released by the eruption was equivalent to somewhere between four and 18 megatons (of TNT)

A tsunami nearly 50 feet high pummelled some of Tonga's populated islands.

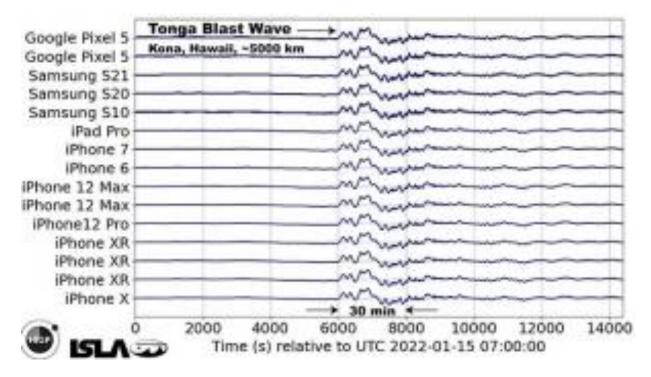
Blast heard as far away as Alaska, was heard in North Queensland

An atmospheric scientist at the University of Miami, Brian McNoldy, recorded six waves (as of Jan. 19) passing over the region.

Discovered this that might be of interest to members.

Red Vox App, Infrasound recorder, available for Android (Nougat or above) and modern iOS phones.

The following graphed pressure data was obtained from phones in Hawaii ~ 5000km away.



Infrasound Laboratory captured signal from Tonga eruption on smartphones via the RedVox App..



Data from your device's (phone), baro, microphone, lat, long, mag, gyro, light, accelerometer etc, is collected and appears to be sent live to 'their servers' typ sample rates are from 80 to 800 sps.

https://www.redvoxsound.com/

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Infrasound Hunter@isoundhunter·Feb 12

Learn much we will from the Tonga Lamb Wave

Milton Garces, Ph.D., Founder and Director, Infrasound Laboratory, University of Hawaii. Founder, RedVox Inc. Loves deep sounds.

https://en.wikipedia.org/wiki/Lamb\_waves

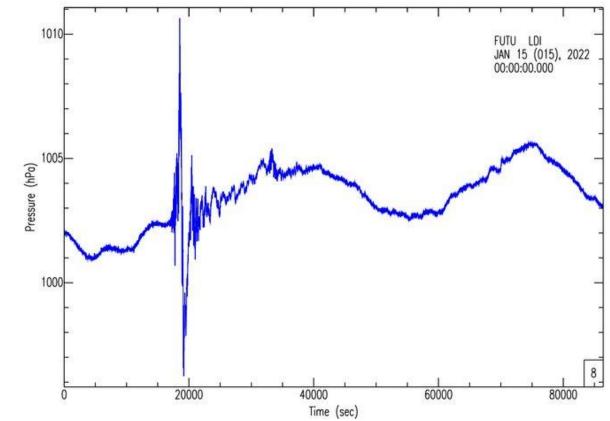
#### \*\*\*\*\*

Läslo Evers@lasloevers · Feb 12Replying to @Nature

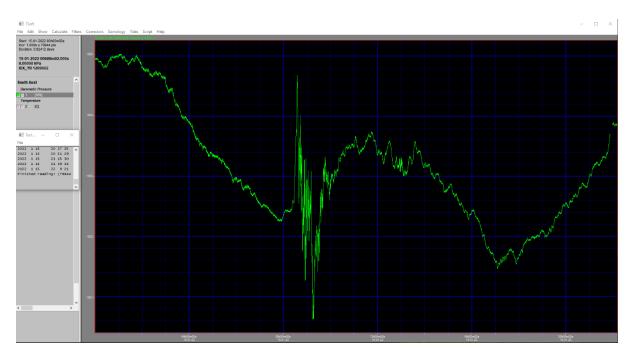
The blast most probably generated Lamb waves which travelled around the globe instead of shock waves. Lamb waves have earlier been observed following large volcanic eruptions and atmospheric nuclear tests. A Lamb wave is an acoustic-gravity wave.

#### \*\*\*\*\*

In addition to the broadband seismic records, we just released publicly (access with standard FDSN tools) the 1Hz pressure records recorded at G.FUTU (LDI channel) recorded during the #HungaTonga eruption. ~15hPa peak-to-peak as shown in the 1-day record below.

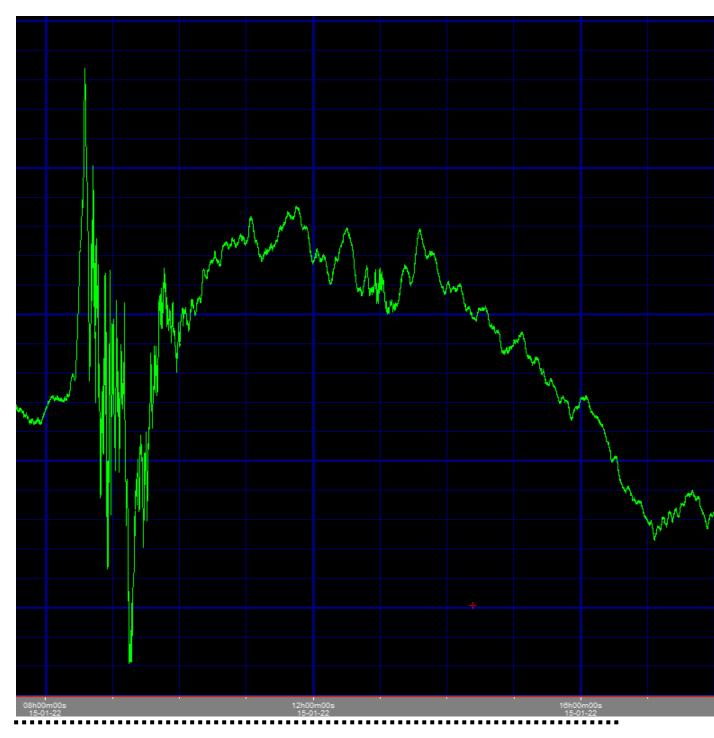


#volcano #Tonga3:03 AM · Feb 10, 2022 · Twitter Web App



### South Aust barometric pressure record

24 hour record for day 15-01-2022 (Blair Athol)



Zoomed in 1sps baro data from Blair Athol

### **Tilly the turtle**

#### www.abc.net.au/news/2022-02-07/tilly-the-turtle-u-turn-before-tongan-volcano/100809656

(07/02/22) Ten weeks ago two green sea turtles were released off the coast of Australia carrying satellite trackers. One of these immediately headed east for 47 days almost directly towards Tonga. Then, very suddenly, she pulled a 180 and noped her way out of there. The next day, the <u>Hunga Tonga-Hunga Ha'apai volcano erupted</u>, setting off the tsunami and rain of ash that has devastated nearby islands.

Jennifer Gilbert of the Cairns Turtle Rehabilitation Center (CTRC) told IFLScience it is "speculative" to declare that Tilly the turtle knew what was coming, but the map of her journey certainly doesn't look like a coincidence. Moreover, as she was heading back towards the Great Barrier Reef a small earthquake struck north Queensland, It wasn't large enough to do damage, but coincided with Tilly diverting her path once again.



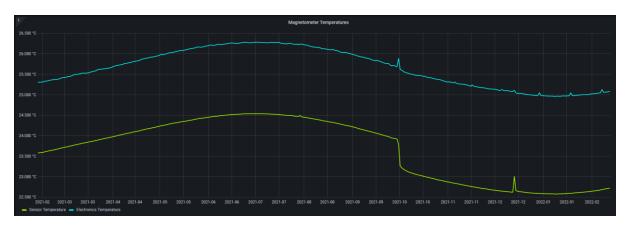


Google 'Animals seismic' for further reading on the subject (not on Tilly)

# **TPSO Magnetometer and Tiltmeter (Dec 2021)**



# **TPSO** vault temperature (Feb 2021 - Feb 2022)



### **TPSO Magnetometer** Daily average of total magnetic field (Feb 2021 - Feb 2022)

