

Tonga volcano eruption was a record explosion

19th May, 2022



A team of scientists has said the volcano that erupted under the sea near Tonga in January set a record. The Tonga-Hunga Ha'apai volcano erupted on January the 15th. It was the biggest explosion ever recorded using

modern instruments and technology. It was also the biggest to happen in the past 150 years. The scientists said the blast may have been as large as the Krakatoa eruption that took place in Indonesia in 1883. Dr Robin Matoza from the University of California said: "Tonga was a truly global event, just as Krakatau was. But we've now got all these geo-physical [recording] systems, and they recorded something that was really [unmatched] in the modern data."

The volcanic eruption sent atmospheric shock waves and tsunami waves around the world. It also caused sonic booms that people heard 10,000km away in Alaska. The eruption even lifted clouds in the sky above the UK, which is 16,500km from Tonga. Scientists in the UK reported the sudden disappearance of clouds as they moved higher into the atmosphere. UK scientist Professor Giles Harrison said the atmosphere was "a remarkably interconnected thing". He said: "What happens on one side of the planet can [spread] around to the other side at the speed of sound." NASA has said the volcano's effects also reached space and could have affected the weather in space.

Sources: bbc.com / nasa.gov / abc.net.au

Writing

We need to spend more money on protecting people from volcanoes. Discuss.

Chat

Talk about these words from the article.

scientists / volcano / Tonga / instruments / eruption / Indonesia / global / systems / atmospheric / tsunami / sonic boom / clouds / planet / speed of sound / weather

True / False

- 1) The Tonga volcano that erupted was part of a mountain chain. T / F
- 2) The volcano was the largest recorded using any instruments. T / F
- 3) Scientists said the explosion was larger than Krakatoa. T / F
- 4) Scientists said the explosion was a regional event. T / F
- 5) The explosion was heard 10,000km away. T / F
- 6) The explosion caused cloudy skies in the UK. T / F
- 7) A professor said the atmosphere was not so interconnected. T / F
- 8) NASA said the explosion had an impact on the weather in space. T / F

Synonym Match

(The words in **bold** are from the news article.)

- | | |
|--------------------------|------------------|
| 1. set | a. totally |
| 2. explosion | b. brought about |
| 3. happen | c. globe |
| 4. truly | d. blast |
| 5. data | e. joined |
| 6. caused | f. created |
| 7. disappearance | g. impacted |
| 8. interconnected | h. facts |
| 9. planet | i. occur |
| 10. affected | j. vanishing |

Discussion – Student A

- a) What do you think about what you read?
- b) What do you know about volcanoes?
- c) What do you know about tsunami waves?
- d) What do you know about sonic booms?
- e) How could a volcano make clouds disappear?
- f) How interconnected is the world?
- g) What weather is there in space?
- h) What questions would you like to ask the scientists?

Phrase Match

- | | |
|-------------------------------------|-----------------------------|
| 1. the volcano that erupted | a. waves |
| 2. It was the biggest | b. as the Krakatoa eruption |
| 3. the biggest to happen in | c. the atmosphere |
| 4. the blast may have been as large | d. explosion ever recorded |
| 5. Tonga was a truly | e. in space |
| 6. shock | f. global event |
| 7. sonic | g. under the sea |
| 8. they moved higher into | h. of sound |
| 9. at the speed | i. the past 150 years |
| 10. affected the weather | j. booms |

Discussion – Student B

- What do you remember about the Tonga volcano?
- Is an underwater volcano more dangerous than one on land?
- Would you live near a volcano?
- What do you think of volcanoes?
- What would you do if a volcano near you erupted?
- What damage do volcanoes do?
- Have you seen any movies about volcanoes?
- What three adjectives best describe volcanoes?

Spelling

- A team of niistscte
- using modern trunteisms
- the latbs may have been as large
- a ytlur global event
- rdnrocegi systems
- in the ndrmeo data
- nicos booms
- the sudden aaedisarppenc
- moved higher into the emosrahpet
- a krmblearay interconnected thing
- on one side of the npetal
- ectedaff the weather in space

Answers – Synonym Match

| | | | | |
|------|------|------|------|-------|
| 1. f | 2. d | 3. i | 4. a | 5. h |
| 6. b | 7. j | 8. e | 9. c | 10. g |

Role Play

Role A – Volcanoes

You think volcanoes are the worst natural disasters. Tell the others three reasons why. Tell them why their disasters aren't as bad. Also, tell the others which is the least damaging of these (and why): typhoons, floods or heat waves.

Role B – Typhoons

You think typhoons are the worst natural disasters. Tell the others three reasons why. Tell them why their disasters aren't as bad. Also, tell the others which is the least damaging of these (and why): volcanoes, floods or heat waves.

Role C – Floods

You think floods are the worst natural disasters. Tell the others three reasons why. Tell them why their disasters aren't as bad. Also, tell the others which is the least damaging of these (and why): typhoons, volcanoes or heat waves.

Role D – Heat Waves

You think heat waves are the worst natural disasters. Tell the others three reasons why. Tell them why their disasters aren't as bad. Also, tell the others which is the least damaging of these (and why): typhoons, floods or volcanoes.

Speaking – Natural disasters

Rank these with your partner. Put the worst at the top. Change partners often and share your rankings.

- | | |
|---------------|--------------|
| • Volcanoes | • Heat waves |
| • Typhoons | • Blizzards |
| • Tsunami | • Droughts |
| • Earthquakes | • Floods |

Answers – True False

| | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 F | 2 F | 3 F | 4 F | 5 T | 6 F | 7 F | 8 T |
|-----|-----|-----|-----|-----|-----|-----|-----|

Answers to Phrase Match and Spelling are in the text.