SOUNDS.IM

# The sound of Krakatoa

*27 August 1883, official distances that are not averaged, and an estimated 180 dB.*

Typographic only. No photographs inside. Official wording from USGS, NOAA NCEI and a Royal Society blog, re-opened 18 November 2026.

| Point | Official wording |
|---|---|
| **27 August 1883** | A USGS volcano watch dated 22 May 2003 says inhabitants of Rodriguez Island heard the sound of heavy guns firing in the distance. What they had heard were explosions from Krakatau, which lay nearly 5,000 km (3,000 miles) to the northeast — "the loudest and farthest traveled sound in recorded history." |
| **The eruption** | The USGS says a total of 25 cubic kilometres (6 cubic miles) of material were blown into the stratosphere, the eruption column reaching more than 30 kilometres (20 miles) high. A huge tsunami killed tens of thousands. "At no time in history had more people been killed by a volcano." |
| **A second official distance** | NOAA NCEI says the final explosion produced the loudest sound ever recorded in modern history, heard across more than 10% of Earth's surface. Reports of what sounded like distant gunfire came from Australia and Mauritius, more than 2,800 miles (4,600 kilometres) from the volcano. That official distance is not blended with the USGS 5,000 km / 3,000 miles. |
| **Around the globe** | NCEI: within a few hours, pressure waves travelled several times around the globe. Instruments measured the sudden spikes in Great Britain as well as in America. |
| **An estimated 180 dB** | A Royal Society blog of 23 January 2024, looking back to the Society's 1883 committee, says the colossal third explosion produced a pressure wave with an estimated sound intensity of 180dB, audible up to 5,000 kilometres away. The 180 dB is an estimate, and is labelled as one. |
| **Batavia and the Norham Castle** | The same blog says the blast ruptured the eardrums of sailors aboard the RMS Norham Castle off Sumatra, and caused a gasometer in the Batavia gasworks, 160 km away, to register a spike of over 8.5 kilopascals, surpassing the scale. |

## A short quiz

1. What two official hearing distances should not be averaged?
2. How does the Royal Society blog describe the 180 dB figure?
3. What did a gasometer in Batavia, 160 km away, register?

**Answers.** Nearly 5,000 km / 3,000 miles (USGS) and more than 2,800 miles / 4,600 kilometres (NCEI). An estimated sound intensity of 180dB. A spike of over 8.5 kilopascals, surpassing the scale.

Wording from USGS Hawaiian Volcano Observatory, Volcano Watch, 22 May 2003; NOAA NCEI, "On This Day: Historic Krakatau Eruption of 1883"; and the Royal Society, "Crowdsourcing Krakatoa," 23 January 2024; re-opened 18 November 2026. sounds.im is independent of those organisations. Typographic sheet: no photographs inside.