

The Eruption of Mount Vesuvius

Text adapted from Melbourne Museum Account, Exhibition, 2009

Pliny the Younger, 18 at the time of the eruption, wrote the only surviving eye-witness account of what happened. His description is therefore an important primary source. This type of volcanic event is actually named after Pliny: a Plinian eruption is one characterized by repeated explosions.



A Timeline and Eye-witness Account

24 August 79 AD

8 a.m. There was a series of small emissions from Mount Vesuvius.

Ⓐ *For several days past, there had been earth tremors, which was not particularly alarming because they are frequent in Campania.* – Pliny the Younger

1 p.m. Vesuvius erupts suddenly and with great force. A cloud of volcanic materials soars high above the mountain. Within thirty minutes, the surging dark cloud rises about 14 km above Vesuvius. Ash drifts over Pompeii.

3 p.m. Vesuvius sends its contents higher and higher. As it rises, the volcanic material — mostly fragments of hardened lava (lapilli) — cools and then hails down on Pompeii. Most residents flee, although some seek shelter or stay behind to guard their property.

Ⓑ *... there was a danger from falling pumice stones ... As a protection against falling objects, they put pillows on their heads tied down with cloths...* – Pliny the Younger

5 – 6 p.m. Chunks of pumice, as big as 50cm, plummet from the cloud. Streets and roads are buried deep under the accumulated pumice, lapilli and ash, and the roofs of Pompeii buildings begin to collapse under the weight. The dense cloud now rises about 25km above Vesuvius, blotting out the sun. Darkness, broken only by flashes of lightning, adds to the terror of fleeing inhabitants.

25 August 79 AD

1 – 2 a.m. Scalding mudflows of volcanic debris mixed with steam spill from the volcano and down the slopes, choking the town of Herculaneum. Ash, lapilli and pumice continue to rain down on Pompeii, the debris now rising as high as the upper storeys of buildings. It bursts through windows, doors and roofs, trapping and suffocating those hiding within.

Ⓒ *Soon great flames and vast fires shone from many points on Mount Vesuvius, the gleam and light made more vivid by the night time shadows.* – Pliny the Younger

4 a.m. The volcanic plume above Vesuvius, now 30 km high, grows too heavy and begins to collapse. The column cascades to earth, sending superheated ash and gases roaring in turbulent waves, called pyroclastic flows, down the volcano's slopes. The first flow reaches Herculaneum, killing any inhabitants who still remained.

5 a.m. Strong earthquakes continue to shake the whole area. A second, even hotter surge further buries Herculaneum. At Pompeii, the rain of pumice eases, but darkness prevails as the massive ash cloud hides the rising sun. Some survivors try to flee their hiding places and escape the town. But it is hard to breathe in the ash-clogged air, or to walk – or even crawl – over the deep layer of volcanic fallout.

Ⓓ *We were followed by a panic-stricken mob of people wanting to act on someone else's decision.* – Pliny the Younger

6:30 a.m. The third pyroclastic surge, the strongest yet, reaches Pompeii from the north but is held back by the town's wall.

6.30 – 7:30 a.m. Several powerful surges overcome the walls and sweep over the town in massive waves of toxic gas and burning, smothering ash. Pompeii's remaining inhabitants are killed instantly and the city is buried. Most who die at Pompeii perish in this phase of the eruption.

Ⓔ... my mother implored... me to escape... I refused to save myself without her, and grasping her hand forced her to quicken her pace. – Pliny the Younger

8 a.m. The most destructive surge hits Pompeii, preceded by a storm of fire and lightning. The town's tallest structures are burned, toppled and buried.

Luckily for Pliny the Younger, the surge loses momentum before it reaches Misenum, though the town is engulfed in a dense cloud of ash.

Volcanic activity, electrical storms and mudslides continue for several days. By the time the eruption ends, Vesuvius's summit has collapsed, leaving a crater 200 metres lower. The entire region is annihilated — towns, vegetation, livestock, people. Only the tops of the highest walls remain unburied to show where Pompeii stood.

Ⓕ Finally, the cloud lifted and vanished in a sort of smoke or fog... The sun even reappeared, but pale, as when there is an eclipse... The landscape looked changed and was covered by a thick blanket of ash, as if it had snowed. – Pliny the Younger

One More Reading

1 Match these terms with the underlined words. The shaded letters and hints will help you:

i disappeared – _____

ii completely destroyed – _____

iii begged – m _____

iv burning hot – _____ d _____

v poisonous – _____ x _____

vi fall at high speed – p _____

vii die violently – _____ h _____

viii slows down – _____ m _____

ix surrounded by – _____

2 Match up these definitions by drawing branches:

- | | | | |
|-------------------|-----------------------|-----------------------|--|
| pyroclastic surge | <input type="radio"/> | <input type="radio"/> | hardened lava pieces |
| primary source | <input type="radio"/> | <input type="radio"/> | fluid mass of fast-moving and burning hot gas and rock |
| Plinian eruption | <input type="radio"/> | <input type="radio"/> | evidence created at the time being investigated |
| lapilli | <input type="radio"/> | <input type="radio"/> | an eruption with repeated explosions |

3 Read each piece of Pliny's primary source evidence carefully. Match Ⓐ to Ⓕ with the conclusions below:

Evidence

Conclusion

Ⓐ to Ⓕ

The environment was unrecognisably different after the eruption.

Parts of the mountain were burning during the night.

Pliny himself was in danger.

People were not particularly alarmed by the earthquakes, since they were used to them.

Whilst fleeing from the city, many people were terrified and unsure of what to do.

The debris falling from the sky caused the people to think up ways to protect themselves as best they could.

