

# [Ancient history of pompeii history essay](https://assignbuster.com/ancient-history-of-pompeii-history-essay/)

Explain what the written and archaeological sources reveal about the 79AD eruption in Pompeii and Herculaneum.

There are various sources of evidence that reveal a significant about of information about the 79AD eruption. In AD63 in his book Naturales Quaestiones, Seneca made reference to an earthquake that occurred during the previous year which destroyed most of Pompeii and Herculaneum.[1]He writes “…Herculaneum is in ruins.”[2]Unfortunately no connection was made between earthquakes and eruptions, therefore the civilians of Pompeii and Herculaneum were soon to discover the disaster of 79AD.

The main ancient written source on the eruption however is the two letters from Pliny the Younger to Tacitus. In one, Pliny highlights the events that lead to the death of his uncle who was an encyclopaedist and commander of the roman fleet.[3]The second letter illustrates Pliny’s own experiences at Misenum during the phases of the eruption giving a great analysis of the eruption process. Although his letters are bias towards his uncle, the facts related to the eruption are reliable pieces of information for he doesn’t twist the story to suit the eruption; rather he twists it to suit his uncle’s predicament. The account of Pliny is corroborated by the geological evidence that is present in the strata located beneath the earth. He dates the eruption to the 24th of August and spans across 36 hours. “ The eruption is best described as a pine…” illustrating the physical nature of the eruption process. “ The sight that met our still terrified eyes was a changed world, buried in ash like snow.[4]” Pliny also reveals the measures people took to protect themselves for instance “ as protection from falling objects, they put pillows on their heads…” He made reference to the stages of the eruption as they occurred in chronological sequence thus allowing modern historians such as Sigurdsson to reconstruct history. The value associated with Pliny’s account is an indication of how much more significant literary sources are over physical evidence.[5]

The abrupt reaction from Pliny the Elder on the eve of the eruption alludes that it was an unprecedented event. Evidence that affirms this proposition is the discovery of the Pompeian bakery of Modestus who deserted his thermopolium leaving 81 loaves of bread cooking in his oven during the eruption.

Written and archaeological sources disclose much information concerning the 79AD eruption. Vulcanologists Haraldur Sigurdsson used Pliny’s account and archaeological evidence to determine the impact of the eruption on the two cities. Primarily, it was thought that the Vesuvian eruption was a series of mud and lava flows that decimated the city’s landscapes. Revisionist archaeologists such as Sigurdsson state otherwise. He claims there were two phases; a period of pumice and ash followed by a series of numerous pyroclastic surges and flows. The surges are hot clouds of gas and air at 500 kilometres per hour at 400 degrees centigrade whilst flows are dense, dry, avalanches of molten rock, pumice and gas at slower speeds and very high temperatures.[6]From stratigraphical analysis, Haraldur indicates that the first phase resulted in 2. 8 meters of pumice and ash. According to him, roofs began to collapse after the accretion of 40 centimetres of sediment.[7]Through observing the number of bodies that lie persevered above the layer of the first phase, Sigurdsson noted that every individual in Herculaneum died during the first surge. The civilians in Pompeii, who were 11 kilometres away from the volcano, suffered the same fate four surges later.[8]Haraldur also makes reference to the volcano, claiming it to be more efficient than an entire army of the pharaoh’s embalmers due to the fact that it preserved the cities so well.[9]The discovery of a barrel vaulted boat chamber containing 300 people in Herculaneum by Sigurdsson’s team unravelled much information depicting that soaring temperatures like that in surge two, was necessary for the carbonisation process to take place. Bodies that weren’t exposed too much heat show less or no signs of carbonisation. Therefore it can be deduced that the 79AD eruption was a key element in persevering the ancient cities of Pompeii and Herculaneum.[10]

Based on the letters, Haraldur has given an educated assumption as to when these sequences of events took place. In one of his letters, Pliny mentions that it occurred around lunchtime. The alteration from white to grey pumice took place at around 5: 30am according to Source A which is a modern representation by Sigurdsson relating to his interpretation of when the events occurred. At the start of the first phase, the winds blew towards Pompeii resulting in no pumice build-up in Herculaneum. The strata build-up begins with the first pyroclastic surge that decimated Herculaneum around 12am on August 25th.[11]The second surge occurred at 2am and the third at 6: 30 am. The fourth, which was strong enough to reach Pompeii, took place at 7: 30am. The fifth and sixth occurred at 7: 45am and 8am respectively. The last is the most deadly and exceeds 250 kilometres per hour and reaches Stabiae where Pliny the Elder succumbs to his fate. Source B is a modern scientific schematic depicting the lengths that each surge travelled resulting in Herculaneum being buried under 20 meters of ash and Pompeii buried under 4 meters in addition to the shoreline of the cities extending 400 meters due to pumice accumulation.[12]

Modern historians indicate quite precisely how individuals died in both Pompeii and Herculaneum. Initially, archaeologists speculated that individuals in Pompeii had died as a result flying projectiles. New evidence revealed from the work of Sigurdsson exemplifies that during the first phase, people were prone to death from flying magma debris and other projectiles travelling at 600 meters per second. Source C shows a victim in Pompeii that died as a result of a wooden slab that struck him. Roofs collapsing led to an encouragement for people to evacuate. Radiologist Francesco Sasso examined the skulls of the victims attempting to escape Pompeii and observed that their sinuses and windpipes were clogged with dust particles indicating that many died from asphyxiation.[13]However in Herculaneum, instantaneous death came with the first surge. Temperature in the boat chamber soared to 500 degrees centigrade and all died due the expansion and explosion of the brain. Evidence of blackening residue in the skulls found by Estelle Lazer in Source D corroborates this theory.

Moulds of organic material that was once present are evident in the soil composition of Pompeii and Herculaneum. Modern sources such as Estelle Lazer’s book ‘ Resurrecting Pompeii’ states that Giuseppe Fiorelli, in 1863, was the first to introduce the idea of plaster casts which involved filling the mould with plaster in order to create a solidified impression of how the victims died at the time of the blast.[14]Estelle Lazer, an Australian archaeologist, was responsible for the reconstruction of disarticulated bones. She indicates the possibility that people may have escaped after the first outburst from the volcano; they would’ve gathered their belongings and escaped from the deadly fourth surge in time to make it past Stabiae after the final and most dangerous surge exterminating the entire reaming populace of Pompeii[15]. Assistance from forensic analysts has enabled historians to further understand how people died. Many were uncovered in positions that compliment exposure to high temperatures such as contraction of limbs and the hunching of the back similar to Source E caused by exposure to vast amounts of heat on protein causing muscles to squeeze tightly. In total, from the skeletal remains uncovered, 296 skeletons have been excavated in Herculaneum and 1150 of the 10, 000 that settled in Pompeii, as estimated by Wallice-Hadril, have been unearthed.[16]

Both written and archaeological evidence supply an in-depth analysis of what occurred nineteen hundred years ago when both cities were devastated by Mount Vesuvius. Although it wiped out the entire civilisation, it was efficient in preserving much of the ruins. Numerous archaeologists and historians have studied both sites and uncovered evidence which outlines the series of events that unfolded during the 79AD eruption.

Appendix

## Source A

(Pellingro, C. 2004. Ghosts of Vesuvius: a new look at the last days of Pompeii, how towers fall, and other strange connections. HarperCollins Publishers, New York USA)

## Source-B

(Ernesto De Carolis, Giovanni Patricelli. 2003. Vesuvius, A. D. 79: The Destruction of Pompeii and Herculaneum. L’erma Di Bretschneider Publishing, Italy. English translation 2003 by J. Paul Getty Trust)

## Source-C

(Lazer, E. 2009. Resurrecting Pompeii. Routledge publishing, USA & Canada)

## Source-D

(Lazer, E. 2009. Resurrecting Pompeii. Routledge publishing, USA & Canada)

## Source-E

(Lazer, E. 2009. Resurrecting Pompeii. Routledge publishing, USA & Canada)