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Shredded phones are rich gold ore

"The amount of gold contained in one ton of mobile phones is 300-400 grams, which is much higher by 10-80 times than that in one ton of natural gold ore," the authors wrote. "The other elements have a similar situation. Consequently, the recovery of those precious elements from e-wastes is much more effective and efficient when compared to their collections from natural ore."

Gold and certain other precious metals are key ingredients in computer chips, including those used in consumer electronics such as smart phones. But it can be difficult to recover and recycle those metals from electronic waste. Japanese researchers have found that a pigment widely used by artists, called [Prussian blue](#), can extract gold- and platinum-group metals from e-waste much more efficiently than conventional bio-based absorbents.

Prussian blue is the first modern synthetic pigment. There was once a pigment known as [Egyptian blue](#) used in ancient Egypt for millennia; the Romans called it caeruleum. But after the Roman empire collapsed, the pigment wasn't used much, and eventually the secret to how it was made was lost. (Scientists have since figured out how to recreate the process.) So before Prussian blue was discovered, painters had to use indigo dye, smalt, or the pricey ultramarine made from lapis lazuli for deep blue hues.

Amazingly, the US market for used phones is \$50 billion annually with most of the money paid for professionally refurbished smartphones a few years old that are sold for bargain prices half or less the price of the essentially equivalent newest models.

Many people consider their two or three-year old phones to be disposable waste without realizing that they can trade-in or sell their phone for good money at sites such as:

<https://www.backmarket.com/en-us>

Info: shpr.fyi/usedphones



Krakatoa more recent eruption 1883.

Sixth century eruptions darkened skies causing years of trouble

The **volcanic winter of 536** was the most severe and protracted episode of climatic cooling in the [Northern Hemisphere](#) in the last 2,000 years.^[1] The [volcanic winter](#) was caused by an eruption, with several possible locations proposed in various continents. Most contemporary accounts of the volcanic winter are from authors in [Constantinople](#), the capital of the [Eastern Roman Empire](#), although the impact of the cooler temperatures extended beyond Europe. Modern scholarship has determined that in early 536 [CE](#) (or possibly late 535) an eruption ejected massive amounts of sulfate aerosols into the atmosphere, which reduced the solar radiation reaching the Earth's surface and cooled the atmosphere for several years. In March 536, Constantinople began experiencing darkened skies and cooler temperatures.

The late-535 eruption of Mt. Krakatoa led to the 535-536 AD Global Climate Change, a rapid change in Earth's climate. The event is caused by a

atmospheric dust veil, dropping the temperature, blocking of sunlight and causing many social devastations such as droughts and crop failures.

Archaeologist and journalist David Keys says that Krakatoa's late-535AD eruption caused widespread climate change, resulting in floods, droughts and extreme low temperatures. In the aftermath, plague spread across the world. These factors destabilized old regimes all over the world, creating power vacuums into which new empires arose. Keys links this to the rise of Islam, the migration of the Avar to Europe (and the displacement of other people in the process), the rise of the Turks, the decline of Britain and Teotihuacan, the reunification of China and the rise of Buddhism in Japan.



Ilopango539-540 eruption artist rendition

Second Eruption- 539-540

The ices of [Greenland](#) and Antarctica bear the fingerprints of a monster: a gigantic [volcanic eruption](#) in 539 or 540 A.D. that killed tens of thousands and helped trigger one of the worst periods of global cooling in the last 2,000 years. Now, after years of searching, a team of scientists has finally tracked down the source of the eruption.

The team's work, [published in Quaternary Science Reviews](#), lays out new evidence that ties the natural disaster to [Ilopango](#), a now-dormant [volcano](#) in El Salvador. Researchers estimate that in its sixth-century eruption, Ilopango expelled the equivalent of 10.5 cubic miles of dense rock, making it one of the biggest volcanic events on Earth in the last 7,000 years. The blast was more than a hundred times bigger than the 1980 Mount St. Helens eruption.

A 2019 paper featured in [Science Magazine](#) said the Ilopango mega-eruption caused an "18-month period of global cooling around 536 AD, marked by cloudy skies, [crop failures](#) and famines as far away as China."

The researchers involved in the latest study, examined numerous major mega-eruptions, and concluded that the Ilopango seismic event's "volume of its pyroclastic flows," which are fast-moving currents of gas, volcanic ash and pumice, were "ten times that of Mt. Vesuvius when it buried Pompeii," and that it killed every living thing within 25 miles and rendered an area twice that size uninhabitable for a century-and-a-half.

Summer temperatures in 536 fell by as much as 2.5 degrees Celsius (4.5 Fahrenheit degrees) below normal in Europe. The lingering impact of the volcanic winter of 536 was augmented in 539-540 when another volcanic eruption caused summer temperatures to decline as much as 2.7 degrees Celsius (4.9 Fahrenheit degrees) below normal in Europe.^[2] There is evidence of this Ilopango volcanic eruption in 547 which would have extended the cooler period. The volcanic eruptions, accompanied by the [Plague of Justinian](#), which began in 541, caused crop failures, famine, and millions of deaths and initiated the [Late Antique Little Ice Age](#), which lasted more than a century from 536 to 660.^[3]

Medieval scholar Michael McCormick has written that 536 was the worst year in history to be alive. "It was the beginning of one of the worst periods to be alive, if not the worst year."^[4]

Read this week's Bible Readings on page 6 which includes the apostles' encouragement to Hebrews who had converted to Christianity: "...Entertain strangers, for by so doing some people have entertained angels..." Hebrews 13:2 NIV

Dave Bunting, Aug. 22, 2022

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See these columns on my blog

daverant.com

