

The first mass extinction on Earth

440 million years ago

Ordovician-Silurian extinction

Species made extinct: 85%

It occurred in a period when organisms such as corals and shelled creatures such as trilobites filled the world's shallow waters but hadn't yet moved onto land.

The cooling process and mass glaciation caused it but we are not sure what triggered the events. It might have been a gamma-ray burst from a supernova, volcanic activity or mountain erosion.

The second mass extinction on Earth

374 million years ago

Late Devonian Mass extinction

Species made extinct: 70%

The Earth climate stabilized and species adapted to new environments, but many aquatic plants adapted to live on land, leaving fewer autotrophs to create oxygen for all of the sea life.

Temperatures plummeted because of removing too much of the greenhouse gas so quickly and land species were unable to adapt to these changes. Later probably followed many volcanic eruptions, which lead to even more extinct species.

The third mass extinction on Earth

252 million years ago

The Great Permian Extinction known as "Great Dying"

Species made extinct: 95%

Life on Earth was diverse and more complex, both in seas and on land. There were many types of animals, reptiles, insects, amphibians and even ancestors of mammals. This largest extinction wiped out 95% of all the planet's species.

It is also known as "Great Dying". Scientists think that on the Earth started great volcanic eruption in Siberia, which released huge amounts of CO₂ to the atmosphere and the climate heated up. Sea levels rose and acid rain beat down on the land.

The fourth mass extinction on Earth

201 million years ago

Triassic-Jurassic extinction

Species made extinct: 76%

It occurred at the end of a period when all landmass was part of a supercontinent, Pangea. The climate was dry and warm. The first dinosaurs appeared and at its end also the first mammals.

The extinction paved the way for the dinosaurs' later dominion. Its cause is debated to be climate change and ocean acidification, which might have been caused by extensive volcanic activity.

The fifth mass extinction on Earth

65 million years ago

Cretaceous-tertiary extinction

Species made extinct: 75%

Dinosaurs dominated on land, marine life included ammonites and reptiles, new mammals and birds appeared and flowering plants began to diversify. The climate was warm, the poles lacked ice.

Probably caused by a large asteroid impact near the Yucatan, which would cause a long impact winter, climate change maybe contributed. Giving way to large-scale radiations of new species, e.g. mammals.