The 'great dying': rapid warming caused largest extinction event ever

Rapid global warming caused the largest extinction event in the Earth's history, scientists

have found. The mass extinction, known as the "great dying", occurred around 252m years ago

and marked the end of the Permian geologic period.

The event was the single greatest *calamity* ever to befall life on Earth, *eclipsing* even the

extinction of the dinosaurs 65m years ago. Up to 96% of all marine species perished while more

than two-thirds of *terrestrial* species disappeared.

calamity 灾难

eclipse 超过;使黯然失色

perish 死亡; 毁灭

terrestrial 地球的; 陆地的

The researchers built a model to analyze changes in animal metabolism, ocean and climate

conditions. They found that marine animals essentially suffocated as warming waters lacked the

oxygen required for survival. "For the first time, we've got a whole lot of confidence that this is

what happened," said Deutsch, an oceanography expert who co-authored the research. "It's a

very strong argument that rising temperatures and oxygen depletion were to blame."

metabolism 新陈代谢

suffocate 压制;使窒息

Over the past century, global warming is already causing punishing heatwaves, flooding and

wildfires around the world, with scientists warning that the temperature rise could reach 3 °C or

more by the end of the century unless there are immediate, radical *reductions* in emissions.

reduction 减少

At the same time, Earth's species are undergoing what some experts have termed the "sixth

great extinction" due to habitat loss, *poaching*, pollution and climate change.

poach

"The past holds the key to the future," said Pamela Grothe, a paleoclimate scientist at the

University of Mary Washington. "If we continue in the trajectory we are on with current

emission rates, this study highlights the potential that we may see similar rates of extinction in marine species as in the end of the Permian."

trajectory 轨道