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## Wait, I Thought it was an Asteroid?

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# Wait, I Thought it was an Asteroid?

*Impact may have intensified volcanic eruptions that killed the dinosaurs*



by Richard Melton

Since childhood we have all had a love of and fascination with dinosaurs, and most of us were taught that these reptiles ruled prehistoric earth until they went extinct due to a large asteroid collision with the earth some 65 million years ago. This extinction led to the rise of other animal groups. However, new evidence might show that this story isn't completely correct. In fact, a study published in *Science* shows that volcanic activity on a global scale actually started this mass extinction, which was previously thought



to have been caused by the asteroid. This volcanic activity may have started many years before the asteroid struck the Earth. An estimated hundred thousand years before the asteroid hit. The asteroid subsequently intensified the volcanic activity. Radiometric analysis of newly found rocks were used to determine the sequence of events that led to the end of the dinosaur reign.

**“This volcanic activity may have started many years before the asteroid struck the Earth.”**

The previous theory of this extinction was that a asteroid hit the earth and caused massive volcanic activity which wiped out most of Earth's terrestrial life. New evidence presented by Paul R. Renne and colleagues supports the idea that the asteroid hit after the volcanic activity had started. This idea was proposed when scientists dated rocks found in the Deccan trap, a lava field in India. The rocks were estimated to be 66 million years old. Samples from before, during, and after the extinction were taken, and they showed that the output of lava nearly doubled within 50,000 years of the asteroid impact. Since events like this are rare, it is most likely that the asteroid impact played a huge role in causing this global problem.

Because the two events happened in quick succession (geologically speaking), it is unknown which had the bigger impact on the dinosaur extinction. Scientists think that the effects of either of these events individually would have been similar to the effects from a combination of the events. Had the time of the two events not been so close, life on earth could have turned out very differently than we see it today or could have quite possibly been completely wiped out.

Further study is needed to determine the specific sequence of events that led to the dinosaur extinction occurrence. The study gives much needed insight into how the reptilian kings we have come to love lost their hold on the planet and soon after vanished into extinction, which led to the rise of other animal groups and the beginning of the mammalian reign. 🐾