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**PAPER TITLE**

**ANALYSING AND EVALUATING THE POSSIBLE IMMEDIATE AND LONG-TERM HAZARDS OF ASTEROID IMPACT EFFECTS ON EARTH WITH VARIOUS CASE STUDIES OF EARTH’S GREATEST HITS.**

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**ABSTRACT**

From the early cretaceous – Paleogene era to the current Cenozoic era, the earth has been slammed by Near-Earth asteroids throughout its history, but we are lucky that no large ones have slammed into the planet lately. Even though astronomers with modern computerized techniques are vigilantly watching the skies hoping to spot the potential impactors far enough in advance so that we can safeguard our earth by doing something to keep away the impactors bombarding our earth, but still, there are some innocuous asteroids with few meters in diameter that can only be detected a few hours in advance when they are passing very close to our planet. But the vast majority of the time, they are plainly imperceptible. One of the significant cases are the Chelyabinsk impact. Moving on its orbit around the Sun, it approached us in the daylight sky - totally hidden in the Sun’s glare. So far, only four impact events have been successfully forecasted in advance. Inevitably, experiencing sudden impacts like these come out of the blue is indubitably the norm, rather than a misfit!  So, analyzing the asteroid thoroughly from every aspect is a crucial need. This paper focuses on doing a case study of the asteroids that have impacted the earth and by using the simulation software, a complete research evaluation will be done on possible immediate and long-term effects of the future impactors on our planet. The motive of the paper is to develop an iterative simulation technique that would predict the possible effect of future impact by analyzing the collected data from the previous asteroids that have hit the earth. That is by changing the parameters like size, velocity, angle of impact, the density of asteroids we will be evaluating the post-impact effect loss over the global, land, or the water concerning the impact scenario.