

Asteroid 2024 YR4 No Threat to Earth: Near Zero Impact

Description

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Recently considered the most perilous asteroid, 2024 YR4 now poses an almost negligible risk of colliding with Earth in 2032, as affirmed by NASA and the European Space Agency.

NASA's calculation estimates the likelihood of the asteroid colliding with Earth in December 2032 at a mere 0.0017%, while the ESA concurs with a comparable risk assessment of 0.002%.

This translates to a 1 in 59,000 chance of impact, signifying a 99.9983% probability that the asteroid will safely pass by Earth in seven years, per <u>NASA</u>. Additionally, NASA reports a 1.7% probability of the asteroid colliding with the moon, although this marginal risk does not threaten Earth.

NASA conveyed, "Upon initial discovery, asteroid 2024 YR4 presented a faint but discernible potential of impacting our planet in 2032."

"Ongoing observations submitted to the Minor Planet Center allowed NASA's Jet Propulsion Laboratory to refine the asteroid's trajectory with enhanced precision, determining that there exists no significant risk of impact for the next century. Recent observations have further minimized uncertainties regarding its future path, expanding the potential locations of the asteroid on December 22, 2032, farther from Earth."

Over the weekend, the asteroid's Torino Impact Hazard Scale ranking plummeted to zero, denoting a non-existent or exceptionally low collision probability. This assessment extends to small objects such as meteors and atmospheric-disintegrating bodies, as well as rare meteorite falls causing minimal harm.

Initially detected on December 27, 2024, asteroid 2024 YR4 spans an estimated 131 to 295 feet (40 to 90 meters) in width, akin to a sizable edifice, capable of inflicting localized devastation upon impact.

Vocabulary List:

- 1. Perilous /'perilos/ (adjective): Full of danger or risk.
- 2. Negligible /'nɛglɪdʒəbl/ (adjective): So small or unimportant as to be not worth considering.
- 3. Likelihood /'laɪklihʊd/ (noun): The state or fact of something being likely; probability.



- 4. **Trajectory** /trəˈdʒɛktəri/ (noun): The path followed by a projectile or an object moving under the action of given forces.
- 5. **Assessment** /əˈsɛsmənt/ (noun): The evaluation or estimation of the nature quality or ability of someone or something.
- 6. **Devastation** / devə'ster[ən/ (noun): Severe and overwhelming shock or grief; great destruction or damage.

Answer

CATEGORY

1. Sci/Tech - LEVEL6

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