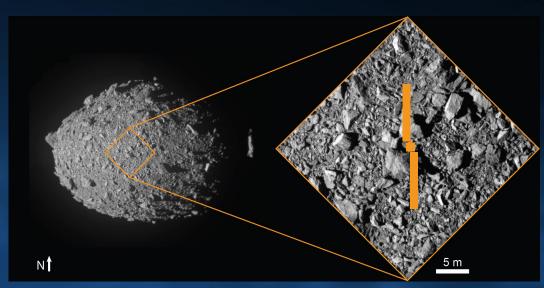
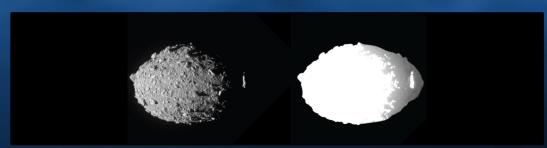


Successful kinetic impact for planetary defense



The DART spacecraft slammed into Dimorphos at the location indicated by the orange square (spacecraft bus) and two orange rectangles (solar arrays) in the right panel. The spacecraft schematic is to scale and in the proper orientation.



The combination of sunlight (left) and reflected light from Didymos (right) revealed the size and shape of Dimorphos.

The successful impact of the DART spacecraft with Dimorphos and the resulting change in the asteroid's orbit demonstrates that kinetic impact is a viable technique to potentially defend Earth.

- Slamming a spacecraft into an asteroid to change the object's orbit—a method known as kinetic impact—is a way to potentially prevent an impact.
- The DART mission was the first full-scale demonstration of kinetic impact technology for asteroid deflection.
- DART's success means that with adequate warning time humanity has the technology to potentially prevent a natural disaster caused by asteroid impact.