



NEAT Landed NEA Characterization Mission

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The Near Earth Asteroid Trailblazer mission will significantly improve our understanding of the physical properties and orbital dynamics of small NEAs.

- NEAT addresses NASA's congressional direction to track, catalog and characterize sub-kilometer near-Earth objects in order to facilitate warning and hazard mitigation.
- *In situ* characterization, engineering and science data (including mass) will be invaluable in developing defenses against threatening objects.
- Measures orbital perturbations to help understand non-gravitational forces (such as the Yarkovsky effect) that can significantly change the orbits of small asteroids such as Apophis. In situ transponder provides orders of magnitude improvements over ground-based position estimates.
- NEAT's compact spacecraft design is potentially compatible with multiple launch vehicle choices to reach a broad range of targets.

