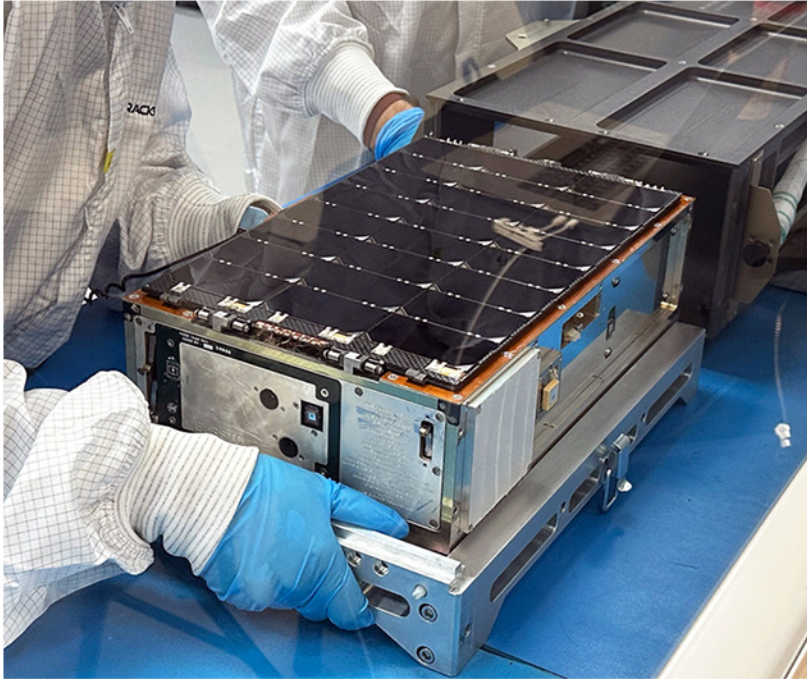


BurstCube



BurstCube is a shoebox-sized satellite designed to study the universe's most powerful explosions. It launched to the International Space Station aboard SpaceX's 30th Commercial Resupply Services mission on March 21, 2024, and deployed into orbit on April 18, 2024. BurstCube re-entered Earth's atmosphere on Sept. 16, 2024, marking the end of the mission.

The mission will study gamma-ray bursts, the most powerful explosions in the cosmos. Specifically, BurstCube will hunt for short bursts, which last less than two seconds. Short bursts most commonly occur following the collisions of neutron stars, the superdense remnants of massive stars that exploded in supernovae. Astrophysicists are interested in these phenomena because they also produce gravitational waves, or ripples in the fabric of space-time. By studying both light and gravitational waves – an approach called multimessenger astronomy – they can learn more about different aspects of the event.

The shoebox-sized BurstCube satellite has observed its first gamma-ray burst, the most powerful kind of explosion in the universe, according to a recent analysis of observations collected over the last several months.

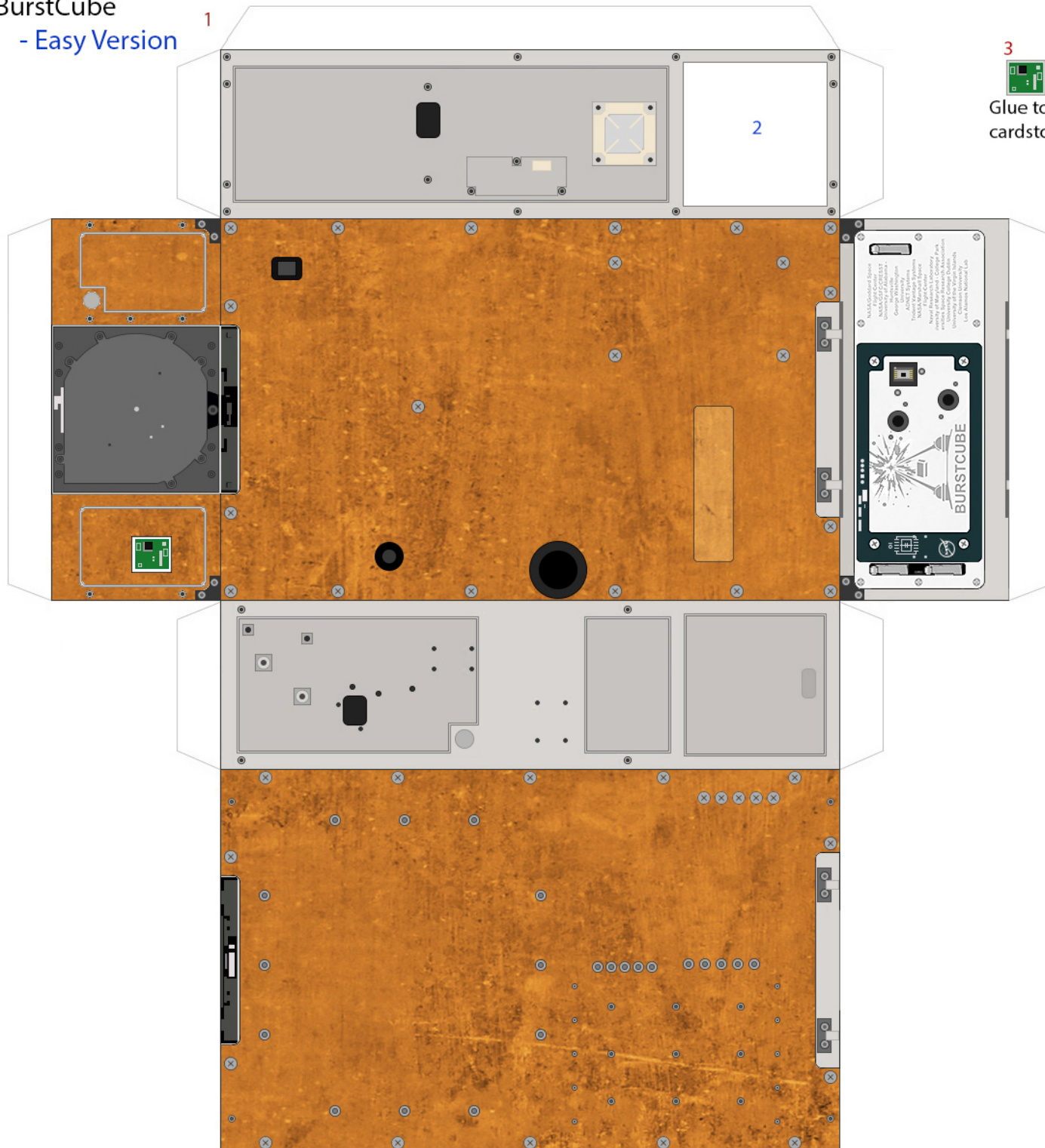
The event, called GRB 240629A, occurred on June 29 in the southern constellation Microscopium. The team announced the discovery in a GCN (General Coordinates Network) circular on August 29.

BurstCube is the first CubeSat to use NASA's TDRS (Tracking and Data Relay Satellite) system, a constellation of specialized communications spacecraft. Data relayed by TDRS (pronounced "tee-driss") help coordinate rapid follow-up measurements by other observatories in space and on the ground through NASA's GCN.

BurstCube also regularly beams data back to Earth using the Direct to Earth system — both it and TDRS are part of NASA's Near Space Network.



BurstCube - Easy Version



3
Glue to
cardstock

2
Glue to two (2) layers
of cardstock



4
Solar Panel glue tab

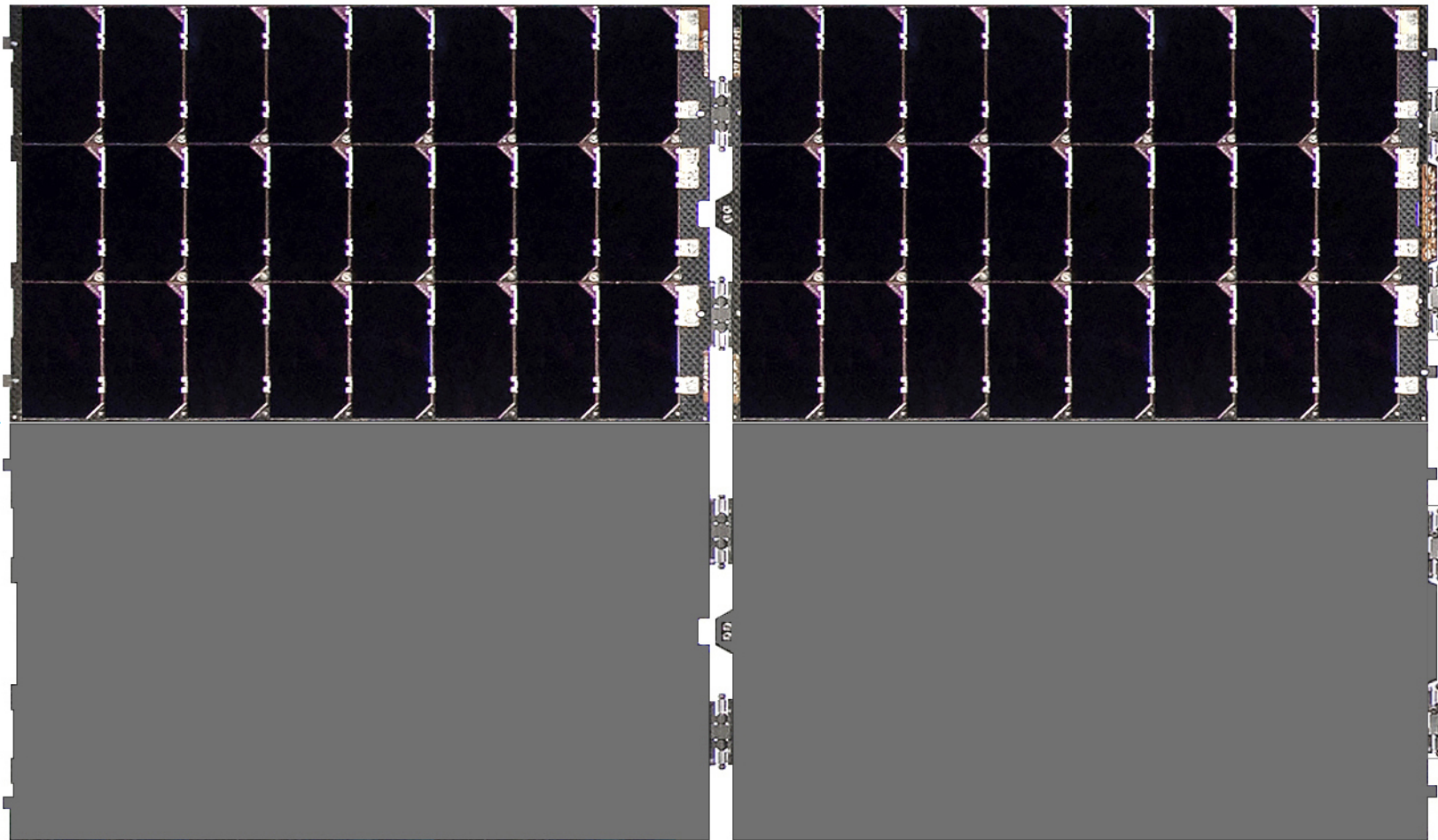
Solar Panel glue tab

Fold, glue back-to-back
at the Blue lines

NOTE

The front face of the solar panels are photos of the real thing.

Fold, glue back-to-back at the blue lines



NOTE

The front face of the solar panels are photos of the real thing.

Fold, glue back-to-back at the blue lines

