

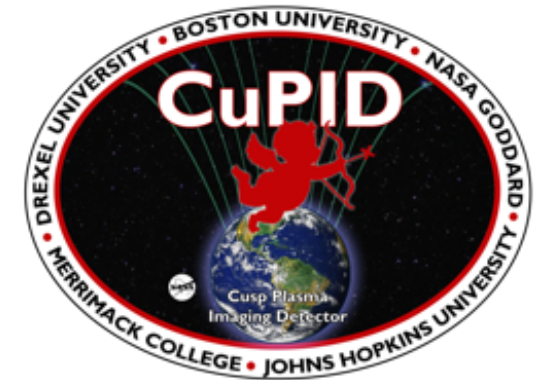
# CuPID CubeSat's Astrophysics Connections



- The Cusp Plasma Imaging Detector (CuPID) CubeSat hitched a ride with LandSat 9 when it launched Monday, September 27. CuPID's X-ray telescope is designed to capture low-energy X-rays produced when solar winds collide with Earth's magnetosphere, a protective bubble produced by our planet's magnetic field.
- Astrophysicists are interested in this process because the same mechanisms are also important in studying cosmic objects and events like magnetars and gamma-ray bursts.
- Goddard built the X-ray instrument, which was first tested on the 2015 DXL-II sounding rocket to study X-ray emission from the local galaxy.
- CuPID is a cross-disciplinary collaboration between astrophysics, heliophysics, and planetary science. All three divisions will be involved in operations and data analysis along with university partners.



Emil Atz, Boston University graduate student, and Kenneth M Simms, Goddard engineer, wired elements of the CuPID spacecraft in January 2020 at Goddard.



Engineers inserted CuPID into its deployer for flight. The black circular hole on the left is the X-ray telescope aperture