NASA’s Heliophysics Flight Opportunities in Research and Technology Program

Abstract

The Heliophysics Flight Opportunities in Research and Technology (H-FORT) program performs space and science and science-enabling investigations that use platforms including Small Satellites, CubeSats, Hosted Rideshare Payloads, and International Space Station (ISS) attached payloads.

The H-FORT program encourages the development of technologies that will enable investigation of heliophysics science questions. The program also encourages the use of innovation, commercially available spaceflight hardware, rideshare launch opportunities, and high risk to drive the cost of achieving science to a fraction of what was previously possible. H-FORT missions also provide an opportunity for preparing future leaders of NASA spaceflight missions and most missions are supported by academic institutions and involve both graduate and under-graduate students.

Since starting the program in 2013, 27 missions have been awarded, twelve missions and seventeen spacecraft have flown, three missions are waiting for launch, eleven missions are in development, and one mission was not completed as planned.

This paper will provide an overview of the Heliophysics Flight Opportunities in Research and Technology (H-FORT) program and will provide a summary of the missions that have been awarded. This will include mission successes, challenges, failures, and lessons learned.

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