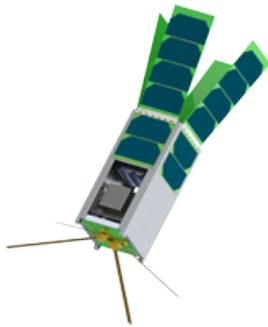


Mission Description:

- Increase the precision measurements of the cosmic x-ray background in the 30-50 keV range
- Constrain models that explain the relative contribution of cosmic x-ray sources to the CXRB
- Provide data that will lend insight into the underlying physics of the diffuse x-ray background
- Provide flight heritage for innovative CubeSat technologies
- Provide flight heritage for CZT-based x-ray-gamma ray detector



Spacecraft Specifications:



- Spacecraft developers: Morehead State University Space Science Center, Kentucky Space, University of California Berkley, Noqsi Aerospace Ltd.
- Integration & testing location: Morehead State University Space Science Center (Kentucky USA) and California Polytechnic, San Luis Obispo, Calif.
- Mass: 2.8 kg
- Power: 15 W max generated: regulated power to subsystems at 3.3 VDC, 5VDC, 12VDC
- Size: 2U= 10cm x 10cm x 20cm

Major Milestones:

- Completion of requirements, design, and mission/flight readiness reviews
- Completion of fabrication benchmarks
- Integration, Launch and LEOP-contact established and subsystems operating nominally

Science Objectives:

- Three million seconds of data
- ~1 year of operation
- Broadband S/N ~250
- End of mission de-orbit in 15 years

