

NASA SmallSat Highlights 2026

smallsat.org

National Aeronautics and Space Administration



This compendium of Small Satellite Conference events and presentations is limited to those sponsored by NASA, include NASA participation, or are topics related to NASA. Presentations given by other organizations on a NASA-related topic are indicated by an asterisk. Visit the SmallSat 2026 website for the complete list of conference events and to confirm scheduled times and locations.

Side Meetings

<https://smallsat.org/extras/side-meetings>

SUNDAY, AUGUST 23

LOCATION

- 9:00AM - 4:00PM **Advanced F Prime Flight Software Tutorial** — NASA Jet Propulsion Laboratory 251 A
- 9:00AM - 4:00PM **F Prime Tutorial at the 2026 Small Satellite Conference** — NASA Jet Propulsion Laboratory 250 D/E

MONDAY, AUGUST 24

- 3:25PM - 4:10PM **NASA Update** — NASA Grand Ballroom

TUESDAY, AUGUST 25

- 9:55AM - 10:40AM **Industry-Enabled Service Paradigms for Mars Exploration** — NASA Jet Propulsion Laboratory 250 D/E
- 9:55AM - 10:40AM **Lessons from Heliophysics: Engineering Challenges and Best Practices from a Stellar Launch Cycle** — NASA Heliophysics Division 251 B/C

Research & Academia Sessions

LOCATION
Grand Ballroom

<https://smallsat.org/conference/research-academia>

SUNDAY, AUGUST 23

ADVANCED TECHNOLOGIES RESEARCH & ACADEMIA 1
Session Chair:
Samson Phan
NASA Ames Research Center

Advancing Wavelet-Adaptive Interference Cancellation to Enable CubeSat Constellations for High-Fidelity AC Magnetometry 9:45AM - 10:00AM
— NASA Goddard Space Flight Center

YEAR IN REVIEW RESEARCH & ACADEMIA

Arcstone: Calibration of Lunar Spectral Reflectance from Space - One Year On-Orbit Performance 11:15AM - 11:30AM
— NASA Langley Research Center

R5 Spacecraft 7, 9, and 10: Proximity Operations, Optical Comm, and Edge Compute 11:45AM - 12:00PM
— NASA Johnson Space Center; NASA Ames Research Center

Results from NASA's Distributed Spacecraft Autonomy Project's Extended Mission on Starling — NASA Ames Research Center **Alternate**

SPACECRAFT GRAPHIC CREDITS (top banner): Left to right: Starling, Credit: NASA; DiskSat, Credit: The Aerospace Corporation; PUNCH (Polarimeter to Unify the Corona and Heliosphere), Credit: Southwest Research Institute; Aspera, Credit: SFL Missions Inc. and University of Arizona; SunRISE (Sun Radio Interferometer Space Experiment), Credit: NASA / JPL-Caltech; SNAPPY (Solar Neutrino Astro-Particle Physics), Credit: Wichita State University; LASSO Artist Concept (Lunar Assay via Small Satellite Orbiter), Credit: NASA; CAPSTONE 02 (Cislunar Autonomous Positioning System Technology Operations and Navigation Experiment), Credit: Terran Orbital.

Research & Academia Sessions (cont.)

LOCATION
Grand Ballroom

<https://smallsat.org/conference/research-academia>

SUNDAY, AUGUST 23

**SCIENCE/MISSION
PAYLOADS RESEARCH
& ACADEMIA**
Session Chair:
Bruce Yost
NASA Ames Research Center

The Solar Neutrino and Astro-Particle Physics (SNAPPY) CubeSat Development — Skewray Research, LLC; Wichita State University (NASA Innovative Advanced Concepts Program Funded)* **2:00PM - 2:15PM**

Operating the SPARCS Space Telescope — NASA Jet Propulsion Laboratory **3:00PM - 3:15PM**

**ADVANCED TECHNOLOGIES
RESEARCH & ACADEMIA 2**
Session Chair: Luis Santos
NASA Goddard Space
Flight Center

NASA-Chaired Session - No NASA-Authored Papers Presented

Enterprise Sessions

LOCATION
Grand Ballroom

<https://smallsat.org/conference/enterprise>

MONDAY, AUGUST 24

YEAR IN REVIEW
Session Chair:
Roger Hunter
NASA Ames Research Center

DiskSat: On-Orbit Performance and Lessons Learned from the Inaugural Flight of Two-Dimensional Satellites **11:00AM - 11:15AM**
— The Aerospace Corporation (NASA Small Spacecraft & Distributed Systems Funded)*

The Pandora SmallSat: Overview of the First Six Months in Orbit **11:45AM - 12:00PM**
— NASA Ames Research Center; NASA Goddard Space Flight Center

Artemis CubeSats Help Advance Exploration of the Moon, Mars, and Beyond — NASA Marshall Space Flight Center **12:00PM - 12:15PM**

ACS3 Results and Lessons Learned — NASA Ames Research Center; NASA Langley Research Center; NASA Marshall Space Flight Center **12:15PM - 12:30PM**

NEXT ON THE PAD

The Landolt Mission: An Artificial Star for Precision Astronomy **2:00PM - 2:15PM**
— NASA Goddard Space Flight Center

**ADVANCED
TECHNOLOGIES 1**
Session Chair:
Justin Treptow-Miller
NASA Research and Technology
Mission Directorate,
NASA Headquarters

Delay/Disruption Tolerant Networking in Cislunar Space **4:45PM - 5:00PM**
— NASA Goddard Space Flight Center

*Presentations given by other organizations on a NASA-related topic.

TUESDAY, AUGUST 25

**ADVANCED
TECHNOLOGIES 2**

Flight Test of the autonomous Navigation, Guidance, and Control (autoNGC) Software on the Starling Swarm
— NASA Goddard Space Flight Center

8:30AM - 8:45AM

NASA's Small Spacecraft and Distributed Systems: Development and Demonstration of Technologies Enabling Swarms and New Spacecraft Platforms with AI and Edge Computing
— NASA Ames Research Center; NASA Headquarters

9:00AM - 9:15AM

CubeSat LED Transmitter for Optical Communication Downlink
— NASA Johnson Space Center

Alternate

FUTURE DIRECTIONS

Christopher Baker, Lead, In-Space Infrastructure Portfolio
— NASA Research and Technology Mission Directorate, NASA Headquarters

10:45AM - 11:10AM

Joseph Casas, Small Missions Integration Manager and DoD S&T Projects Senior Technical Advisor, Technology Demonstration Missions Program Office — NASA Marshall Space Flight Center

12:00PM - 12:25PM

CONSTELLATIONS

Software Defined Swarms — NASA Ames Research Center

2:45PM - 3:00PM

**SCIENCE / MISSION
PAYLOADS**

HyTI-2: Advancing Hyperspectral Thermal Imaging into the Era of Space-Based Edge Processing — NASA Goddard Space Flight Center

4:15PM - 4:30PM

WEDNESDAY, AUGUST 26

**ADVANCED
TECHNOLOGIES 3**

A Survey of the State of the Art in Multi-Spacecraft, Multi-Agent Swarms — NASA Ames Research Center

10:45AM - 11:00AM

**LAUNCH &
PROPULSION**

Initial Flight Test Data of the Duplex 6u Satellite and The FPPT and MVP Thrusters — CU Aerospace (NASA Small Spacecraft & Distributed Systems Funded)*

1:30PM - 1:45PM

Access to Space for NASA Small Sats: Current and Future Needs
— NASA Science Mission Directorate

2:45PM - 3:00PM

**GROUND
SYSTEMS**

Scaling Distributed Spacecraft Autonomy Operations with Simple Temporal Networks: Introducing Splinter — NASA Ames Research Center

4:15PM - 4:30PM

Operational Resilience in CubeSat Tracking Operations Through Complementary Architectures at DSS-17 — NASA Jet Propulsion Laboratory

5:00PM - 5:15PM

*Presentations given by other organizations on a NASA-related topic.

MONDAY, AUGUST 24

SESSION 1

Session Chair:
Michael Gaunce
NASA Ames Research Center

NASA-Chaired Session - No NASA-Authored Flash Talks Presented

3:30PM - 4:15PM

TUESDAY, AUGUST 25

SESSION 2

Session Chair:
Young Lee
NASA Jet Propulsion
Laboratory

Lessons from Heliophysics: Engineering Challenges and Best Practices from a Stellar Launch Cycle — NASA Heliophysics Division

10:00AM - 10:45AM

Shields-1 Successful Attenuation of Most Energetic Particles in 19 Years — NASA Langley Research Center

SESSION 3

Session Chair:
Jeremy Frank
NASA Ames Research Center

BurstCube Mission Systems: How to Train Your CubeSat
— NASA Goddard Space Flight Center

3:30PM - 4:15PM

Characterization of Novel SiC Focal Plane Arrays, and Their Associated Readout Electronics, to Enable UV Spectroscopy from SmallSat Platforms — NASA Goddard Space Flight Center

University Nanosatellite Mission Concept Program: Evolving Mission Design Education Through AFRL–NASA Collaboration
— NASA Kennedy Space Center

NASA STARI mission: A Formation-Flying Pathfinder for Space Interferometry — University of Michigan, Stanford University (NASA Astrophysics Division Funded*)

WEDNESDAY, AUGUST 26

SESSION 4

Simulation to Science: End-to-End Data Systems for the NASA Pandora Mission — NASA Goddard Space Flight Center; NASA Ames Research Center

10:00AM - 10:45AM

Small Spacecraft Mission Success Goals – How International Space Agencies Utilize Different Implementation Architectures to Assure On-Orbit Results — NASA Ames Research Center

SESSION 5

Session Chair:
Jonathan Stock
NASA Ames Research Center

Towards Terahertz Deep Space Communication
— NASA Jet Propulsion Laboratory

3:30PM - 4:15PM

*Presentations given by other organizations on a NASA-related topic.

MONDAY, AUGUST 24

NASA Short Talks Session #1: The SmallSat Ecosystem: Challenges and Emerging Solutions

9:00AM - 9:45AM

TUESDAY, AUGUST 25

NASA Short Talks Session #2: Engaging with NASA: Partnerships, Programs & Opportunities

10:00AM - 10:45AM

NASA Short Talks Session #3: Small Spacecraft Enabling Science & Informing NASA's Artemis Missions

3:30PM - 4:15PM

WEDNESDAY, AUGUST 26

NASA Short Talks Session #4: Bridging the Gap to Flight: Access, Readiness, and Cost

10:00AM - 10:45AM

NASA Short Talks Session #5: Distributed Small Spacecraft Missions: From Development to Demonstration

3:30PM - 4:15PM

Poster Sessions

LOCATION
See Locations Listed

<https://smallsat.org/conference/posters>

SUNDAY, AUGUST 23 POSTER SESSION 1

Location:
Hallway

Viewing Times:
10:15-10:45 AM
3:15-3:45 PM

No NASA-Authored Posters Presented

MONDAY, AUGUST 24 POSTER SESSION 2

Location:
Exhibit Hall A-E

Viewing Times:
9:00-10:00 AM;
3:15-4:15 PM

Session Chair:
PM Craig Burkhard
NASA Ames Research Center

Ice Giant Watchdog: A CubeSat Concept to Monitor Weather on Neptune
(Poster Board: 6B) — NASA Ames Research Center

NEBULOUS: Applying Genetic Algorithms to Design Next-Generation Satellites for Drag Resilience (Poster Board: 29A) — NASA Jet Propulsion Laboratory; NASA Goddard Space Flight Center

TUESDAY, AUGUST 25 POSTER SESSION 3

Location:
Exhibit Hall A-E

Viewing Times:
9:45-10:45 AM;
3:15-4:15 PM

Session Chairs:
AM Demos Tsairides
PM Michael Riccio
NASA Ames Research Center

Advanced Avionics: Low SWaP HPSC Box for Space Autonomy (Poster Board: 22A)
— NASA Goddard Space Flight Center

Autonomous Onboard Navigation and Mission Planning in a Lunar Near-Rectilinear Halo Orbit (Poster Board: 1A) — NASA Goddard Space Flight Center

MiniZ-45: Enabling Hybrid Processing for Next-Generation Spacecraft Avionics
(Poster Board: 21B) — NASA Goddard Space Flight Center

Small Satellite Rideshares to Deep Space using the STAR™-S 15-24V Concept
(Poster Board: 21A) — NASA Kennedy Space Center

Poster Sessions (cont.)

LOCATION
See Locations Listed

<https://smallsat.org/conference/posters>

WEDNESDAY, AUGUST 26 **POSTER SESSION 4**

Location:
Exhibit Hall A-E

Viewing Times:
9:45-10:45 AM;
3:15-4:15 PM

Session Chair:
AM Jaya Bajpayee
PM Jay Fletcher
NASA Ames Research Center

AutoNGC Flight OpNav Experiment Results on CAPSTONE (Poster Board: 2A)
— NASA Goddard Space Flight Center

autoNGC: One Small High-Fidelity Testbed, One Giant Leap for Autonomous GN&C at the Moon (Poster Board: 20A) — NASA Goddard Space Flight Center

CAPSTONE Demonstration of Real-Time Autonomous Navigation Using One-Way Radiometric Measurements (Poster Board: 1A) — NASA Goddard Space Flight Center

Enabling Earth Independent Navigation, Guidance and Control with the autoNGC Flight Software Framework (Poster Board: 20B) — NASA Goddard Space Flight Center

First Year of Operations for PUNCH: a NASA Heliophysics SMEX Constellation (Poster Board: 27B) — Southwest Research Institute Boulder*

NASA Exhibits

LOCATION
Exhibit Hall /
NASA Exhibit

<https://smallsat.org/exhibit/layout>

Exhibit Hours

All exhibits are open:
MON - WED
9AM - 5PM

BOOTH

NASA ORGANIZATION

635	Transformative Science
641	Access to Space
835	Disruptive Technology
940	Artemis / Space Launch System Payload Integration
NASA Stage - Right	NASA Technology Transfer Program / NASA Small Business Innovation Research / Small Business Technology Transfer Programs / NASA Partnerships Program
NASA Stage - Left	Fly Foundational Robots Mission

*Presentations given by other organizations on a NASA-related topic.