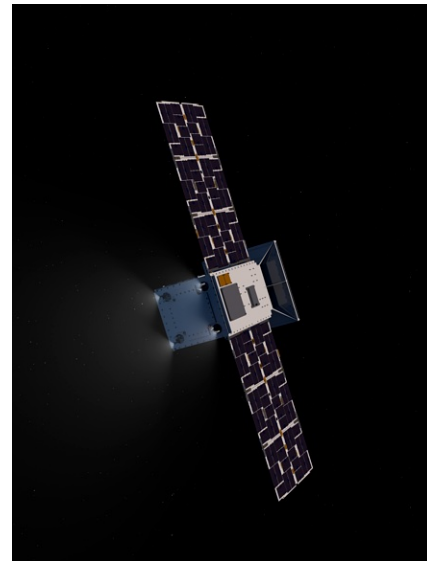




NASA Small Spacecraft Launch Overview for 2022

Over the past several years, investments in small spacecraft have continued to increase across NASA. The development and launch of state-of-the-art SmallSat technologies and the achievement of ground-breaking science using the platform are increasing with pace. So far this year, 11 NASA SmallSat missions have launched, including CAPSTONE, the first SmallSat to use the ballistic lunar transfer approach to reach the Moon. Another 22 SmallSats are scheduled to launch by the end of 2022, including the CubeSat secondary payloads scheduled for launch on the highly anticipated Artemis-I mission. [Read More](#)



CAPSTONE Spacecraft. Credit: NASA

Upcoming Events & Releases

- **Aug. 8:** NASA Town Hall at the 2022 Small Satellite Conference (in-person, presentations to be posted following the live event)
- **Aug. 17:** Community of Practice Webinar - Liquid Lenses for Free Space Optical Communications
- **Sept. 1:** NASA SBIR Ignite 2022 Program Solicitation - Proposals Due (5PM ET)
- **Sept. 1:** Third Stand Alone Mission of Opportunity Notice - SALMON-3 Earth Venture Instrument - 6 - Proposals Due
- **Sept. 13-14:** 24th Annual Small Payload Ride Share Symposium (in-person & virtual)
- **Sept. 14:** Community of Practice Webinar - Shields-1 Dosimetry Measurements in Polar Low-Earth Orbit
- **Oct. 12:** Community of Practice Webinar - *E. coli* AntiMicrobial Satellite: Results and Lessons Learned from NASA's First 6U Biological CubeSat
- **Nov. 16:** Community of Practice Webinar - Safe Space Conduct: NASA Best Practices for SmallSats
- **Dec. 15:** D3 - Astrophysics Research and Analysis Program - Proposals Due
- **Early 2023:** NASA Small Spacecraft Technology State of the Art Report release

Community Engagement

NASA at the 2022 Small Satellite Conference

NASA Participation Guide

Don't miss NASA Technical Presentations, Short Talks, Live

NASA Participation Guide **SmallSat2022**
smallsat.org

This compendium of Small Satellite Conference events is limited to those sponsored by NASA or that include NASA participation. Visit the SmallSat 2022 website for the complete list of conference events and to confirm scheduled times and locations.

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

MONDAY, AUGUST 8

TIME	TOPIC	LOCATION
9:00AM MT	Introduction to Radiation Effects: Enabling Longer Duration and Harsher Environment SmallSat Missions — NASA Goddard Space Flight Center	OM 121
10:00AM MT	NASA Town Hall — NASA Small Spacecraft Systems Virtual Institute	ESCL 130 (Auditorium)
11:30AM MT	NASA JPL F Prime Open Source Flight Software Product Line — NASA Jet Propulsion Laboratory	DBH Presidents Hall

TUESDAY, AUGUST 9

9:45AM MT	Ask Me Anything Panel #1 — NASA Small Spacecraft Systems Virtual Institute	ESCL 130 (Auditorium)
12:45PM MT	Ask Me Anything Panel #2 — NASA Space Technology Mission Directorate	ESCL 130 (Auditorium)

WEDNESDAY, AUGUST 10

9:45AM MT	Ask Me Anything Panel #3 — NASA Science Mission Directorate	ESCL 130 (Auditorium)
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Weekend Technical Sessions <https://smallsat.org/conference/technical-sessions>

SATURDAY, AUGUST 6

8:45AM MT	Autonomous System-level Fault Diagnosis in Satellites Using Housekeeping Telemetry — NASA Goddard Space Flight Center
4:15PM MT	Small Satellite-sized Hypersonic Inflatable Aerodynamic Decelerators for Interplanetary Science Missions — NASA Langley Research Center
5:30PM MT	Flight Envelope Assessment of SmallSat Aerocapture Trajectories at Venus and Mars — NASA Langley Research Center

SUNDAY, AUGUST 7

9:00AM MT	Small Satellite Reliability Initiative (SSRI) Knowledge Base Tool: Use Case Review and Future Functionality and Content Direction — NASA Ames Research Center, NASA Goddard Space Flight Center
2:00PM MT	Adapting on Orbit: Conclusions of the STP-H6 Spacecraft Supercomputing for Image and Video Processing Experiment — NASA Goddard Space Flight Center
5:00PM MT	Snooping Around: Automated Observation Planning for the Signals of Opportunity P-Band Investigation (SNOPPI) — NASA Goddard Space Flight Center

Events, Posters, Workshops, and Exhibits at the Small Satellite Conference

[Download the Guide](#)

Small Spacecraft Community of Practice Webinar Series

Late Summer and Fall Schedule 2022

Join us for upcoming Community of Practice webinars including those in our "Mission Accomplished" Series. Invited speakers will present information on lessons learned, developments in technology, and NASA best practices.

Subscribe via the link below to receive announcements of upcoming webinars.

[Bookmark the Schedule](#)

National Aeronautics and Space Administration

SMALL SPACECRAFT SYSTEMS VIRTUAL INSTITUTE (S3VI)

Small Spacecraft Community of Practice Webinar Series

The Small Spacecraft Systems Virtual Institute (S3VI) hosts a public webinar series to share information with the small spacecraft community at large on work NASA, partner agencies, and other members of the community are performing in the area of small spacecraft. Our "Mission Accomplished" webinars celebrate the success of small spacecraft in helping to achieve science, exploration and technology goals for NASA. These webinars highlight accomplishments of small spacecraft missions as they are employed broadly across all NASA mission areas.

Wednesday, August 17, 2022
10:00AM - 11:00AM Pacific Time
Liquid Lenses for Free Space Optical Communications
Speaker: **SHREEYAM KACKER**
- Massachusetts Institute of Technology, Space Telecommunications Astronomy and Radiation (STAR) Lab

Wednesday, September 14, 2022
10:00AM - 11:00AM Pacific Time
Shields-1 Dosimetry Measurements in Polar Low Earth Orbit
Speaker: **D. LAURENCE THOMSEN**
- NASA Langley Research Center

Wednesday, October 12, 2022
10:00AM - 11:00AM Pacific Time
E. coli AntiMicrobial Satellite (EcAMSat): Results and Lessons Learned from NASA's First 6U Biological CubeSat
Speaker: **MATTHEW LERA**
- NASA Ames Research Center

Wednesday, November 16, 2022
10:00AM - 11:00AM Pacific Time
Safe Space Conduct: NASA Best Practices for SmallSats
Speaker: **LAURI NEWMAN**
- NASA Goddard Space Flight Center

For webinar details visit:
<https://www.nasa.gov/smallsat-institute/small-spacecraft-community-of-practice>

THE S3VI IS JOINTLY SPONSORED BY THE SCIENCE MISSION DIRECTORATE AND THE SPACE TECHNOLOGY MISSION DIRECTORATE

www.nasa.gov



New Mission Design Tools Available

The S3VI tracks publicly available software tools found useful in the development of small spacecraft missions. Tools added to the toolbox this quarter include those for satellite constellation remote sensing, trajectory design and optimization, and mission operations.

Opportunities to Engage

[NASA Solicitations](#)

[Conferences & Events](#)

[Information Search](#)

[Webinar Series](#)

[NASA Resources](#)

Around the Agency

Highlights and links to NASA centers engaged in small spacecraft activities

Image Credit: Spaceflight Inc.



Launch Window

NASA Launch Portal

Looking for a ride? NASA's Launch Portal is a resource to provide SmallSat/CubeSat developers an opportunity to find potential secondary launch opportunities on flights that are support upcoming NASA SmallSat/CubeSat missions.

Recent NASA Launches

Wondering what NASA has launched lately? Visit our listing of recently launched and deployed small spacecraft. Each mission highlight offers information on launch date and vehicle, orbit, deployment status and mission description.

A quarterly brief by the Small Spacecraft Systems Virtual Institute

[WEBSITE](#) | [EMAIL](#)