



NASA Releases Small Spacecraft Reliability Knowledge Base Tool v3.0

NASA's Small Spacecraft Reliability Initiative (SSRI) Knowledge Base v3.0 was deployed on June 28, 2023. The enhancements featured in this version include: an upgrade to the search bar to facilitate search of all content and the addition of fields for each "Best Practices and Lessons Learned" item. These new fields will allow users recommending content to provide more context and detail, and will enable the Knowledge Base to support rich lessons learned content collection during the NASA Learning from Experiences, Achievements, and Resolution Navigation (LEARN) Forum. The SSRI KB Tool is available to the entire small satellite community and can be accessed at <https://s3vi.ndc.nasa.gov/ssri-kb/> [Read More](#)



Upcoming Events & Releases

- Aug 5-10: [Small Satellite Conference](#), Utah State University, Logan, Utah
 - See the [NASA@SmallSat2023 Guide](#) for all NASA content at this year's Small Satellite Conference
 - Aug 7: NASA Town Hall
 - Aug 8: NASA Short Talks Session 1 (streamed live)
 - Aug 9: NASA Short Talks Session 2 (streamed live)
- Aug 28: Proposals Due for the [Suborbital/Hosted Orbital Flight and Payload Integration Services 4](#)
- Sep 13: CoP Webinar - DLR's solutions for Optical Communication on CubeSats
- Oct 4: Full Proposals Due - [Technology Advancement Utilizing Suborbital and Orbital Flight Opportunities "TechFlights"](#)
- Oct 11-12: In-Person [NASA SmallSat LEARN Forum](#) at LaRC. Apply to attend.
- Oct 11: CoP Webinar - Tether Electrodynamics Propulsion CubeSat Experiment
- Dec 11-15: [American Geophysical Union 2023 Fall Meeting](#) in San Francisco, CA
- Feb 20-24, 2024: [Small Satellites and Services International Forum](#) in Malaga, Spain

Community Engagement

NASA at the 2023 Small Satellite Conference

[NASA@SmallSat2023 Guide](#)

NASA@SmallSat2023 smallsat.org

The compendium of Small Satellite Conference events is limited to those sponsored by NASA or that include NASA participation. Visit the SmallSat 2023 website for the complete list of conference events and to confirm scheduled times and locations.

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

SATURDAY, AUGUST 5		LOCATION
6:00PM MT	NASA JPL F Prime Open Source Flight Software Tutorial Day 1 — NASA Jet Propulsion Laboratory / California Institute of Technology	UI 507
SUNDAY, AUGUST 6		
6:00PM MT	NASA JPL F Prime Open Source Flight Software Tutorial Day 2 — NASA Jet Propulsion Laboratory / California Institute of Technology	UI 507
MONDAY, AUGUST 7		
10:00AM MT	NASA Town Hall — NASA Small Spacecraft Systems Virtual Institute	ESCL 130 (Auditorium)
3:30PM MT	Distributed Systems Missions (DSM) and the NASA Operational Simulator for Small Satellites (NOS3) — NASA Goddard Space Flight Center	ESLC 46
3:30PM MT	NASA JPL F Prime Open Source Flight Software Product Line — NASA Jet Propulsion Laboratory / California Institute of Technology	OM 225
WEDNESDAY, AUGUST 9		
3:30PM MT	Exploring Mars Together: Draft Plan for a Sustainable Future for Science at Mars — NASA Headquarters Planetary Science Division	LSB 133

Weekend Technical Sessions <https://smallsat.org/conference/technical-sessions>

SATURDAY, AUGUST 5		LOCATION
ADVANCED TECHNOLOGIES - RESEARCH & ACADEMIA I	A Summary of Neural Radiance Fields for Shadow Removal and Relighting of Satellite Imagery — NASA Ames Research Center	9:00AM MT
MISSIONS AT SCALE - RESEARCH & ACADEMIA	Developing Intelligent Space Systems: A Roadmap and Survey — NASA Goddard Space Flight Center	11:00AM MT
NEXT ON THE PAD - RESEARCH & ACADEMIA	On-Orbit Results from the NASA Time-Resolved Observations of Precipitation Structure and Storm Intensity with a Constellation of SmallSats (TROPSICS) Mission — NASA Goddard Space Flight Center, NASA Langley Research Center	5:00PM MT
SUNDAY, AUGUST 6		
SCIENCE/MISSION RELOADS - RESEARCH & ACADEMIA II	Engineering Challenges of a CubeSat Mission Around the Moon: First Steps on the Path to SelenITA — NASA Marshall Space Flight Center	9:00AM MT
	The Doppler Wind Temperature Sensor (DWTs) Flight Evaluation and Experiments — NASA Ames Research Center	9:45AM MT

Don't miss NASA Technical Presentations, Short Talks, Posters, Swifties, "Meet a Program Executive / Program Manager" opportunities, and Exhibits at the Small Satellite Conference

Download NASA@SmallSat2023

Small Spacecraft Community of Practice Webinar Series

Late Summer and Fall Schedule 2023

Join us for upcoming Community of Practice webinars including the NASA Short Talks streamed live from the 2023 Small Satellite Conference. NASA Short Talk speakers will present on a number of topics in lightning talk format over the course of two sessions held Tuesday and Wednesday, August 8 and 9, 3:30 – 4:30PM Mountain Time.

See the links below for more details and to connect.

Link to the NASA Short Talk Live Stream - [Session 1](#) & [Session 2](#)

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.

Special Webinars

NASA SHORT TALK SESSIONS TO BE HELD IN-PERSON AND STREAMED LIVE FROM THE 2023 SMALL SATELLITE CONFERENCE / NASA HYPERWALL STAGE

Tuesday, August 8, 2023
2:30PM-3:30PM Pacific Daylight Time
NASA Short Talk Session #1
2023 Small Satellite Conference

Wednesday, August 9, 2023
2:30PM-3:30PM Pacific Daylight Time
NASA Short Talk Session #2
2023 Small Satellite Conference

Community of Practice Mission Accomplished Webinar Series

Wednesday, September 13, 2023
10:00AM-11:00AM Pacific Daylight Time
DLR's solutions for Optical Communication on CubeSats
Speaker: BENJAMIN ROEDIGER
- Department of Optical Satellite Links, German Aerospace Center (DLR)

Wednesday, October 11, 2023
10:00AM-11:00AM Pacific Daylight Time
Tether Electrodynamics Propulsion CubeSat Experiment (TEPC)
Speaker: MATTHEW BRUNNER
- US Naval Research Laboratory

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

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www.nasa.gov

NASA Small Spacecraft Technology State-of-the-Art Report

Slated for release in December 2023, the Small Spacecraft Technology State-of-the-Art report



includes a new chapter on orbital maneuvering vehicles as well as extensive updates to a number of existing chapters.

Future releases will undergo specific technology chapter updates every two years.

2022 State-of-the-Art Report

Opportunities to Engage

[NASA Solicitations](#)

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Attending the 2023 Small Satellite Conference?

Have a question about SmallSats at NASA? Bring your questions to the NASA Exhibit Lounge during select afternoon and morning breaks to speak with NASA program executives, program managers, and investigators engaged in NASA SmallSat efforts.

See the schedule in the [NASA@SmallSat 2023 Guide](#)

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.

A quarterly brief by the Small Spacecraft Systems Virtual Institute

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