National Aeronautics and Space Administration

2023 NASA SmallSat In-Person LEARN Forum: Announcements

Bruce D. Yost
Director, NASA Small Spacecraft Systems Virtual Institute
https://www.nasa.gov/smallsat-institute/

National Aeronautics and Space Administration Small Satellite Learning from Experience, Achievements and Resolution Navigation Forum

National Aeronautics and Space Administration

Small Spacecraft Systems Virtual Institute (S3VI)

Promoting Innovative Concepts

Building Community through:

Sharing Knowledge
- SmallSat LEARN Forum
- Community of Practice
  Mission Accomplished Webinar Series
- Access to Space Announcements
- S3VI Quarterly Newsletter
- CubeSat 201

Building Tools
- Small Spacecraft Reliability Initiative Knowledge Base Tool
- Small Spacecraft Information Search
- State of the Art Report
- Space Mission Design Tools Collection
- Anomaly Alert Reporting System

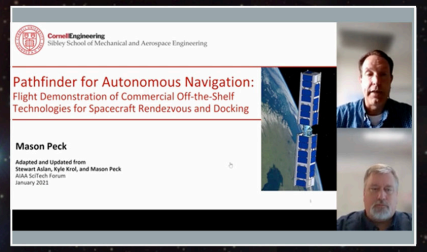
Connecting People and Ideas
- Industry Days Webinar Series
- SmallSat Technology Partnerships – TechExpo
- Cross-Agency Collaboration

Identifying Emerging Technology Opportunities

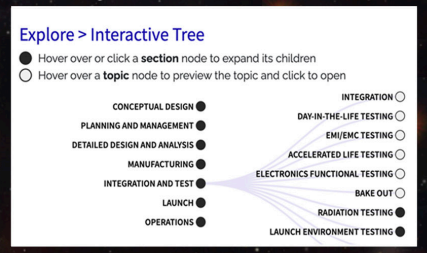
www.nasa.gov/smallsat-institute

Bruce D. Yost
Director, Small Spacecraft Systems Virtual Institute
Bruce.D.Yost@nasa.gov

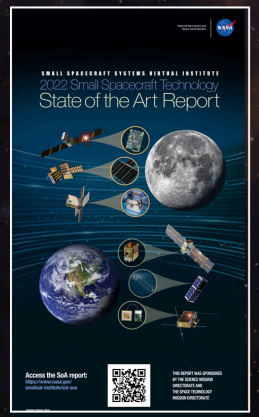
Community of Practice Webinar Series



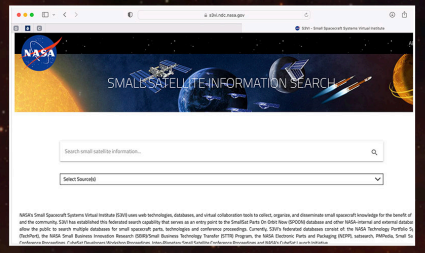
Small Spacecraft Reliability Initiative Knowledge Base



Small Spacecraft Technology State of the Art Report



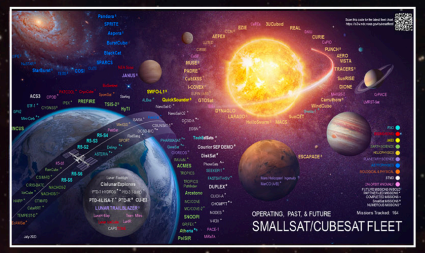
Small Spacecraft Information Search



S3VI Web Portal

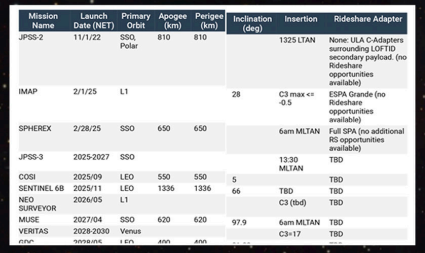
S3VI Newsletter

SmallSat / CubeSat Fleet Chart



NASA SmallSat LEARN Forum

LaunchPortal: Potential Rideshare Opportunities



Mission Name	Launch Date (NET)	Primary Orbit	Apogee (km)	Perigee (km)	Inclination (deg)	Insertion	Rideshare Adapter
JPSS-2	11/1/22	SSO, Polar	810	810		1325 LTAN	None: ULA C-Adapters surrounding LOFTID secondary payload. (no Rideshare opportunities available)
IMAP	2/1/25	L1			28	C3 max <= -0.5	ESPA Grande (no Rideshare opportunities available)
SPHEREX	2/28/25	SSO	650	650		6am MLTAN	Full SPA (no additional RS opportunities available)
JPSS-3	2025-2027	SSO				13:30 MLTAN	TBD
COSI	2025/09	LEO	550	550	5		TBD
SENTINEL 6B	2025/11	LEO	1336	1336	66	TBD	TBD
NEO SURVEYOR	2026/05	L1				C3 (tbd)	TBD
MUSE	2027/04	SSO	620	620	97.9	6am MLTAN	TBD
VERITAS	2028-2030	Venus				C3=17	TBD

Upcoming Events and Announcements - NASA S3VI

Small Spacecraft Community of Practice Webinar Series

Wednesday, October 18, 2023
10:00AM-11:00AM Pacific Daylight Time
Tether Electrodynamics Propulsion CubeSat Experiment
Speaker: Matthew Brunner, *US Naval Research Laboratory*

Wednesday, November 8, 2023
10:00AM-11:00AM Pacific Standard Time
Lessons Learned from a Primarily Undergraduate CubeSat Project (RADSAT-SK)
Speaker: Sean Maw, *University of Saskatchewan*

2023 NASA State-of-the-Art Small Spacecraft Technology Report

- Release planned for December
- New chapter on Orbital Maneuvering Vehicles
- Updates to the following chapters
  - SmallSat Avionics
  - Deorbit Systems
  - In-Space Propulsion
  - Thermal Control Systems
  - Structures, Materials, and Mechanisms

Small Spacecraft Technology Program Guidebooks

- Updates planned for release in early 2024

Open NASA Solicitations with SmallSat Relevance

Space Technology Mission Directorate (STMD)

Technology Advancement Utilizing Suborbital and Orbital Flight Opportunities "TechFlights"
Full Proposals Due: October 11, 2023 (Today!)

NASA TechRise Student Challenge
Entries Due: October 20, 2023

NASA Space Technology Graduate Research Opportunities – Fall 2024 (NSTGRO24)
Proposals Due: November 1, 2023

Suborbital/Hosted Orbital Flight & Payload Integration Services 4
Proposals due: November 1, 2023

NASA Space Tech Catalyst Prize
Register online by: February 8, 2024
Applications due by: February 22, 2024

Science Mission Directorate (SMD)

Research Opportunities in Space and Earth Sciences 2023 (ROSES-2023) D.3 Astrophysics Research and Analysis Program
Mandatory Notice of Intent (NOI) to Propose Due: December 15, 2023
Proposals Due: January 31, 2024

Space Operations Mission Directorate (SOMD)

Announcement of Partnership Opportunity (AoPO) CubeSat Launch Initiative
Proposal Submissions Due: November 17, 2023
Selection Notification: March 15, 2024 (target)
CSLI Open House Meeting (virtual): Mid May 2024 (target)
Launch Opportunity: 2025-2028

NASA S3VI QR Codes

2022 SMALLSAT STATE OF THE ART

COMMUNITY OF PRACTICE WEBINAR SERIES

OPEN NASA SOLICITATIONS

UPCOMING EVENTS

NASA