

Launch Campaign	Launch Provider	Mission Name	Launch Date	Deployment Status	Rocket	Mission Description	Payload(s)	Organization(s)
SpaceX Transporter-10 Rideshare mission	ELaNa 57	M ³ (Multi-Mode Mission)	3/4/24		Falcon 9	This is a microthruster technology demonstration mission on a 3U CubeSat platform that aims to validate the operation and performance of a multi-mode-capable thruster with a student-developed power processing unit and feed system.	Multi-mode propulsion system	Missouri University of Science and Technology
Resupply	ELaNa 51	Big Red Sat-1	3/21/24	4/18/24	Falcon 9	A technology demonstration 1U CubeSat mission, BRS1 will test and demonstrate perovskite solar panel technology from the National Renewable Energy Laboratory. A primary goal of this project is to engage the development of critical technologies to improve solar power generation.	Perovskite solar panels	University of Nebraska
		BurstCube	3/21/24	4/18/24	Falcon 9	A 6U CubeSat mission, BurstCube will continuously monitor for gamma-ray burst events providing greater coverage for rare and unusual transients. This data will give astronomers more information on other gamma-ray sources, and allow for rapid alerts and initial detection of high-energy events.	Gamma-Ray burst detector	NASA Goddard Space Flight Center, University of Alabama, University of Maryland, University of the Virgin Islands, Universities Space Research Association, Naval Research Laboratory, and NASA Marshall Space Flight Center
		HyTI (Hyperspectral Thermal Imager)	3/21/24	4/18/24	Falcon 9	This mission aims to enable the next generation of high spatial, spectral and temporal resolution thermal infrared (TIR) imagery monitoring Global Hydrological Cycles and Water Resources, and developing a detailed understanding of the movement, distribution and availability of water and its variability over time and space from LEO from a 6U CubeSat.	Hyperspectral imager	Saraniasat, Inc., Jet Propulsion Laboratory, United States Geological Survey, University of Hawaii at Manoa, University of Hawaii Maui College
		SNoOpl (Signals of Opportunity P-band Investigation)	3/21/24	4/18/24	Falcon 9	This 6U CubeSat mission aims to demonstrate and validate the in-space use of P-band signals of opportunity to measure root zone soil moisture and snow water equivalent. If successful, this will verify important assumptions about reflected signal coherence, robustness to the RFI environment, and the ability to capture and process the transmitted signal in space.	P-band reflectometer	Purdue University, NASA Goddard Space Flight Center, Jet Propulsion Laboratory
		ACS3 (Advanced Composite Solar Sail)	4/23/24	4/23/24	Electron	The primary objective of the 12U CubeSat ACS3 mission is to demonstrate the successful deployment of the composite boom solar sail in low-Earth orbit.	Composite solar sail	NASA Langley Research Center, AST&Defense LLC of College Park, Maryland, NASA Ames Research Center, Santa Clara University
Resupply	ELaNa 43	CatSat	7/3/24	7/3/24	Alpha	A 6U CubeSat will demonstrate and characterize the performance of a new inflatable antenna technology, record high frequency (HF) radio signals to probe the charges in the ionosphere, and take images of the Earth.	Inflatable Antenna Deployment System (IADS), high frequency (HF) radio antenna, two low resolution metrology cameras and one high resolution HD camera.	University of Arizona
		KUbeSat-1 (Kansas University Satellite 1)	7/3/24	7/4/24	Alpha	This mission will use a 3U CubeSat to further understand exposure in Earth's ionosphere and its effect on crewed missions with a cosmic ray detector.	Primary Cosmic Ray Detector & High-Altitude Calibration (HiCalK) payload	University of Kansas
		MESAT-1 (Maine Satellite 1)	7/3/24	7/4/24	Alpha	A 3U academic mission with three student-designed payloads to study albedo, coastal water quality, and harmful algal blooms.	ALBEDO, IMAGER, DAB	University of Maine
		R5-S2-2.0 (Realizing Rapid, Reduced-cost high-Risk Research)	7/3/24	7/4/24	Alpha	The R5 project is a series of CubeSats that are intended to rapidly and affordably get technology prototypes into LEO. Each evolution of the spacecraft bus will be suitable for a variety of payloads; the R5 S2 and S4 are 6U platforms that aims to assess the suitability of COTS components for free-flying extravehicular inspection capabilities including cameras, computers, and algorithms.	Spacecraft is considered a "payload bus" designed as a technology demonstration platform	NASA's Johnson Space Center
		R4-S4 (Realizing Rapid, Reduced-cost high-Risk Research)	7/3/24	7/4/24	Alpha			
		Serenity III	7/3/24	7/4/24	Alpha	This project serves as a low-cost opportunity for academic experiments, allowing educational interaction with a CubeSat in LEO.	Camera, radiation dosimeters, and a GPS module	Teacher's in Space, Villanova University College of Engineering
		SOC-I (Satellite for Optimal Control and Imaging)	7/3/24	7/4/24	Alpha	A 2U CubeSat that will fly the first in-space demonstration of real-time optimization-based constrained attitude control.	Convex optimization-based attitude guidance algorithm called SOC-i's Optimal Attitude Reorientation (SOAR)	University of Washington
		TES-11 (TechEdSat-11 // Technology Education Satellite-11)	7/3/24	7/4/24	Alpha	TES-11 is a 6U spacecraft that will test an updated Exo-Brake for faster de-orbiting, a neuromorphic processor for onboard AI, and a LEO-to-GEO communication system for improved Earth observation data.	Exo-Brake, BrainStack-3, LEO-to-GEO Communication System	NASA Ames Research Center
Resupply	ELaNa 48	CURIE (CubeSat Radio Interferometry Experiment)	7/9/24	7/9/24	Ariane 6	This mission will use two 3U CubeSats to advance NASA's understanding of the unresolved origins of radio waves coming from the Sun using a technique called low frequency radio interferometry, which has never been used in space before -- representing a pathfinder for radio astronomy in general. The two spacecraft were launched together as a 6U and then separated into the two 3U CubeSats.	Radio interferometer	University of California, Berkeley
Resupply	ELaNa 52	DORA (Deployable Optical Receiver Aperture)	8/4/24	10/9/24	Falcon 9	DORA aimed to demonstrate high-speed connectivity for the cis-lunar communication network using a widefield laser communications suitable for 1000km links.	Optical receiver	Arizona State University, Jet Propulsion Laboratory
		CySAT-1 (Cyclone Satellite 1)	8/4/24	10/9/24	Falcon 9	Academic technology demonstration mission of a 3U to measure Earth's soil moisture using a software defined radiometer in LEO.This mission serves as a pathfinder for the team to understand the radiometer for asteroid surveying payload applications for a future asteroid surveying mission.	Software defined radiometer	Iowa State University