

WEBCAST

A live webcast of this mission will begin about 15 minutes prior to liftoff.

PHOTOS

High-resolution photos will be posted at <u>flickr.com/spacex</u>.

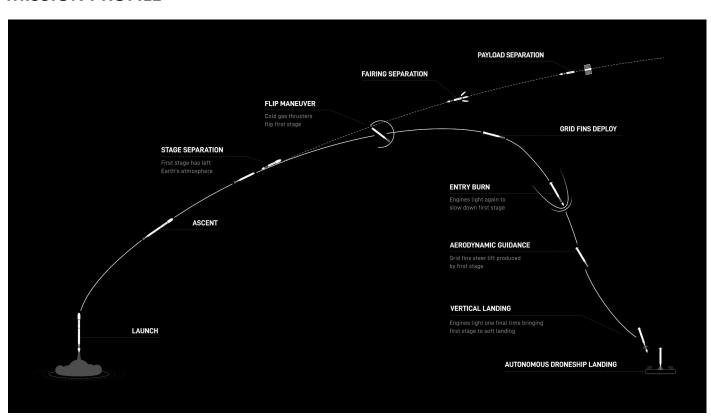
IXPE MISSION

MISSION OVERVIEW

SpaceX is targeting Thursday, December 9 for Falcon 9's launch of NASA's Imaging X-ray Polarimetry Explorer (IXPE) mission to low Earth orbit from historic Launch Complex 39A (LC-39A) at NASA's Kennedy Space Center in Florida. The 90-minute launch window opens at 1:00 a.m. EST (6:00 UTC). A backup opportunity is available on Friday, December 10 with the same 90-minute launch window, should it be needed.

This will be the fifth flight for this Falcon 9's first stage booster, which previously supported launch of Crew-1, Crew-2, SXM-8, and CRS-23. Following stage separation, Falcon 9's first stage will land on the Just Read the Instructions droneship, which will be located in the Atlantic Ocean.

MISSION PROFILE



MISSION TIMELINE (ALL TIMES APPROXIMATE)

COUNTDOWN

Hr/Min/Sec	Event
- 00:38:00	SpaceX Launch Director verifies go for propellant load
- 00:35:00	RP-1 (rocket grade kerosene) loading underway
- 00:35:00	1st stage LOX (liquid oxygen) loading underway
- 00:16:00	2nd stage LOX loading underway
- 00:07:00	Falcon 9 begins engine chill prior to launch
- 00:01:00	Command flight computer to begin final prelaunch checks
- 00:01:00	Propellant tank pressurization to flight pressure begins
- 00:00:45	SpaceX Launch Director verifies go for launch
- 00:00:03	Engine controller commands engine ignition sequence to start
- 00:00:00	Falcon 9 liftoff

LAUNCH, LANDING AND DEPLOYMENT

Hr/Min/Sec	Event
00:01:12	Max Q (moment of peak mechanical stress on the rocket)
00:02:33	1st stage main engine cutoff (MECO)
00:02:36	1st and 2nd stages separate
00:02:44	2nd stage engine starts
00:03:37	Fairing deployment
00:06:19	1st stage entry burn start
00:06:47	1st stage entry burn complete
00:08:04	2nd stage engine cutoff (SECO-1)
00:08:10	1st stage landing burn start
00:08:35	1st stage landing burn complete
00:28:51	2nd stage engine starts
00:29:51	2nd stage engine cutoff (SECO-2)
00:33:22	IXPE deploys