

WEBCAST

<u>A live webcast of this mission</u> will begin about five minutes prior to liftoff.

PHOTOS

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

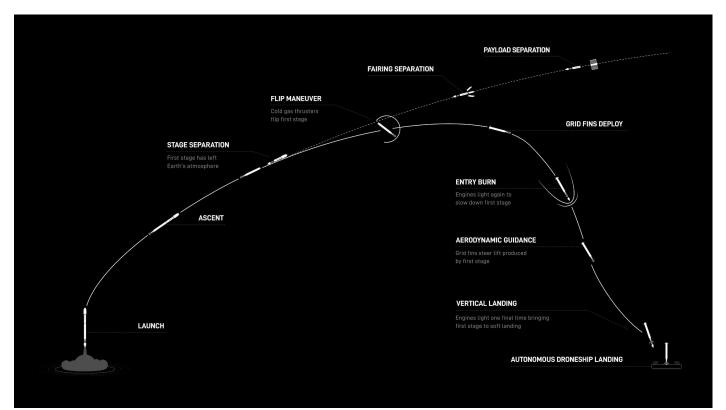
MISSION PROFILE



MISSION OVERVIEW

SpaceX is targeting Saturday, September 10 for a Falcon 9 launch of 34 **Starlink** satellites and AST SpaceMobile's BlueWalker 3 satellite to low-Earth orbit from Launch Complex 39A (LC-39A) at Kennedy Space Center in Florida. The instantaneous launch window is at 9:10 p.m. ET, or 01:10 UTC on September 11, and a backup opportunity is available on Sunday, September 11 at 8:48 p.m. ET, or 00:48 UTC on September 12.

The first stage booster supporting this mission previously launched Crew Demo-2, ANASIS-II, CRS-21, Transporter-1, Transporter-3, and eight Starlink missions. Following stage separation, the first stage will land on the A Shortfall of Gravitas droneship, which will be stationed in the Atlantic Ocean. This will also be Falcon 9's first five-burn mission.



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)
00:02:32	1st stage main engine cutoff (MECO)
00:02:35	1st and 2nd stages separate
00:02:42	2nd stage engine starts
00:03:16	Fairing deployment
00:06:17	1st stage entry burn start
00:06:37	1st stage entry burn complete
00:08:09	1st stage landing burn start
00:08:28	2nd stage engine cutoff (SECO-1)
00:08:31	1st stage landing
00:47:16	2nd stage engine starts (SES-2)
00:47:20	2nd stage engine cutoff (SECO-2)
00:49:51	AST SpaceMobile's BlueWalker 3 satellite deploys
01:07:36	2nd stage engine starts (SES-3)
01:07:38	2nd stage engine cutoff (SECO-3)
01:53:56	2nd stage engine starts (SES-4)
01:54:05	2nd stage engine cutoff (SECO-4)
02:03:49	Starlink satellites deploy