

STARLINK GROUP 4-13 MISSION



MISSION OVERVIEW

SpaceX is targeting Friday, May 13 for a Falcon 9 launch of 53 **Starlink** satellites to low-Earth orbit from Space Launch Complex 4 East (SLC-4E) at Vandenberg Space Force Base in California. The instantaneous launch window is at 3:07 p.m. PT, 22:07 UTC.

The first stage booster supporting this mission previously launched Sentinel-6 Michael Freilich, DART, and two Starlink missions. Following stage separation, Falcon 9's first stage will return to Earth and land on the Of Course I Still Love You droneship stationed in the Pacific Ocean.

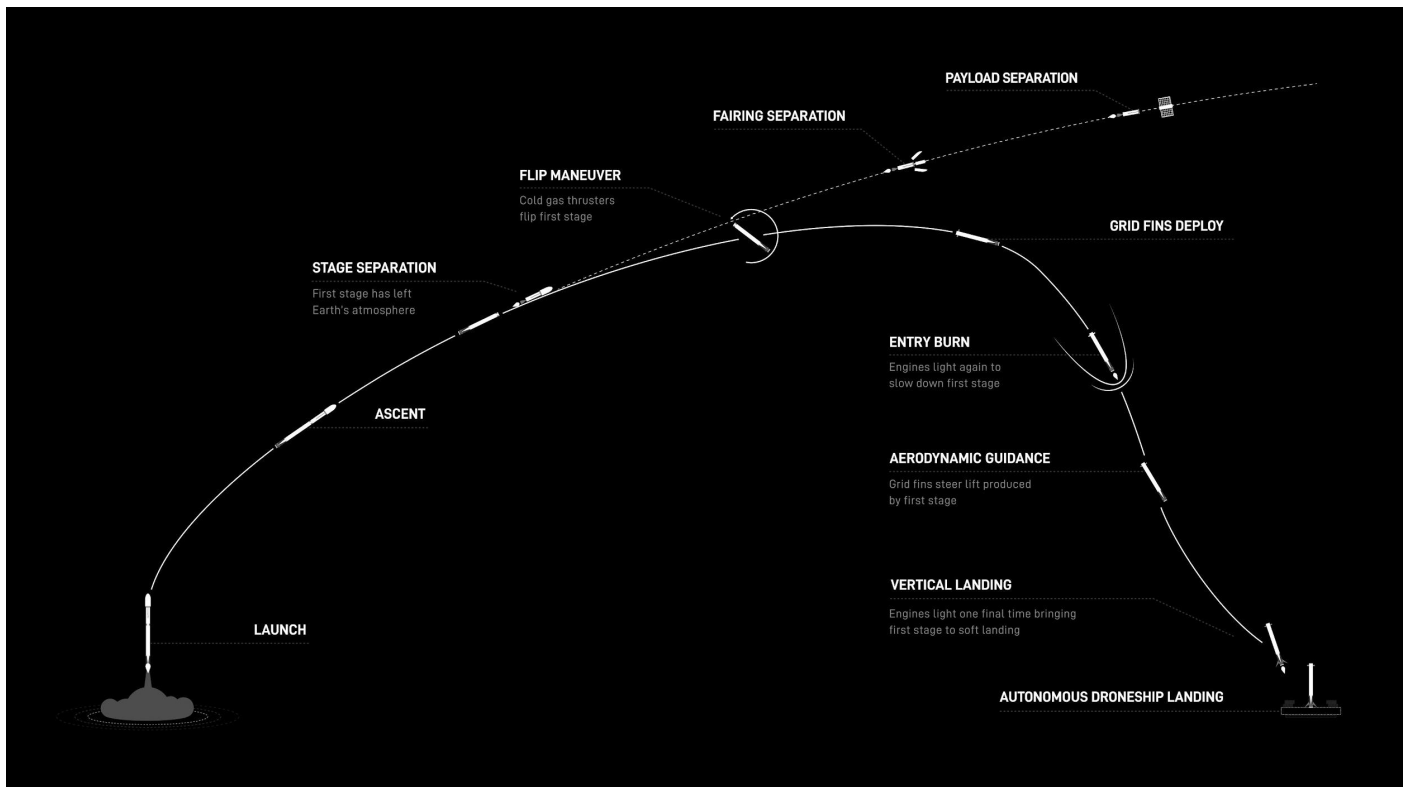
WEBCAST

[A live webcast of this mission](#) will begin about 15 minutes prior to liftoff.

PHOTOS

High-resolution photos will be posted at [flickr.com/spacex](https://www.flickr.com/photos/spacex/).

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)
00:02:30	1st stage main engine cutoff (MECO)
00:02:34	1st and 2nd stages separate
00:02:40	2nd stage engine starts (SES-1)
00:02:45	Fairing deployment
00:06:25	1st stage entry burn start
00:06:44	1st stage entry burn complete
00:08:10	1st stage landing burn start
00:08:33	1st stage landing
00:08:46	2nd stage engine cutoff (SECO-1)
00:53:40	2nd stage engine starts (SES-2)
00:53:41	2nd stage engine cutoff (SECO-2)
01:02:42	Starlink satellites deploy