# **STARLINK-8 MISSION**

# **MISSION OVERVIEW**

SpaceX is targeting Wednesday June 3 at 9:25 p.m. EDT, 1:25 UTC on June 4, for its eighth launch of Starlink satellites. Falcon 9 will lift off from Space Launch Complex 40 (SLC-40) at Cape Canaveral Air Force Station. A backup opportunity is available on Thursday, June 4 at 9:03 p.m. EDT, 1:03 UTC on June 5.

Falcon 9's first stage previously supported the Telstar 18 VANTAGE mission in September 2018, the Iridium-8 mission in January 2019, and two separate Starlink missions in May 2019 and in January 2020. Following stage separation, SpaceX will land Falcon 9's first stage on the "Just Read the Instructions" droneship, which will be stationed in the Atlantic Ocean. Approximately 45 minutes after liftoff, SpaceX's fairing recovery vessels, "Ms. Tree" and "Ms. Chief," will attempt to recover the two fairing halves.

The Starlink satellites will deploy in an elliptical orbit approximately 15 minutes after liftoff. Prior to orbit raise, SpaceX engineers will conduct data reviews to ensure all Starlink satellites are operating as intended. Once the checkouts are complete, the satellites will then use their onboard ion thrusters to move into their operational altitude of 550 km. On this mission, SpaceX will launch the first Starlink satellite with a deployable visor to block sunlight from hitting the brightest spots of the spacecraft. Learn more about our work with leading astronomical groups to <u>mitigate satellite reflectivity</u>.



You can watch the launch webcast here, starting about 10 minutes before liftoff.

# **MISSION TIMELINE**

### COUNTDOWN

All Times Are Approximate

- 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

#### All Times Are Approximate

#### 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)
- 00:02:36 1st and 2nd stages separate
- 00:02:43 2nd stage engine starts
- 00:03:11 Fairing deployment
- 00:07:04 1st stage entry burn complete
- 00:08:42 1st stage landing
- 00:08:58 2nd stage engine cutoff (SECO-1)
- 00:14:54 Starlink satellites begin deployment