

NOVEMBER 17, 2025 06:21 NETHERLANDS TIME

SENTINEL-6B MISSION

On Sunday, November 16 at 9:21 p.m. PT, Falcon 9 launched NASA's **Sentinel-6B** mission from Space Launch Complex 4 East (SLC-4E) from Vandenberg Space Force Base in California.

This was the third flight for the first stage booster supporting this mission, which previously supported two Starlink missions. Following stage separation, the first stage landed on Landing Zone 4 (LZ-4) at Vandenberg Space Force Base.

Sentinel-6B will use radar to bounce signals off of the ocean surface to deliver continuous ocean topography measurements. The mission also will collect high-resolution vertical profiles of temperature to assess temperature changes in Earth's atmosphere and improve weather prediction models. It took over from **Sentinel-6 Michael Freilich**, a twin of Sentinel-6B, which Falcon 9 launched five years ago from SLC-4E on November 21, 2020.

There was a possibility that residents of Santa Barbara, San Luis Obispo, and Ventura counties heard **one or more sonic booms** during the launch, but what residents experienced depended on weather and other conditions.

COUNTDOWN

HR/MIN/SEC	EVENT
00:38:00	SPACE X LAUNCH DIRECTOR VERIFIES GO FOR PROPELLANT LOAD
00:35:00	RP-1 (ROCKET GRADE KEROSENE) LOADING BEGINS
00:35:00	1ST STAGE LOX (LIQUID OXYGEN) LOADING BEGINS
00:16:00	2ND STAGE LOX LOADING BEGINS
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	SPACE X 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 Approximate

HR/MIN/SEC	EVENT
00:01:12	MAX Q (MOMENT OF PEAK MECHANICAL STRESS ON THE ROCKET)
00:02:13	1ST STAGE MAIN ENGINE CUTOFF (MECO)
00:02:17	1ST AND 2ND STAGES SEPARATE
00:02:25	2ND STAGE ENGINE STARTS (SES-1)
00:02:30	BOOSTBACK BURN STARTS
00:02:48	FAIRING DEPLOYMENT
00:03:18	BOOSTBACK BURN ENDS
00:07:22	1ST STAGE ENTRY BURN BEGINS
00:07:48	1ST STAGE ENTRY BURN ENDS
00:08:18	2ND STAGE ENGINE CUTOFF (SECO-1)
00:08:42	1ST STAGE LANDING BURN BEGINS
00:09:11	1ST STAGE LANDS ON LANDING ZONE 4
00:52:02	2ND STAGE ENGINE STARTS (SES-2)
00:52:12	2ND STAGE ENGINE CUTOFF (SECO-2)
00:57:13	SENTINEL-6B DEPLOYS

