

Launch Mission Execution Forecast

Mission: Falcon 9 Starlink 12-25

Issued: 16 Mar 2025 / 1000L (1400Z)

Valid: 18 Mar 2025 / 1409 – 1809L (1809 – 2209Z)



Forecast Discussion: A strong cold front will pass through overnight tonight bringing scattered showers and few possible strong storms. Behind it, gusty northwesterly winds are expected tomorrow as high pressure will build in and be dominant for much of the week. On Tuesday, the primary weather concern will be liftoff winds from northerly flow as the ridge strengthens across the peninsula, with winds gradually decreasing throughout the afternoon. For the backup day, the high center will move over Florida bringing ideal conditions across the Space Coast, so there will be no weather concerns for the launch window.

	Probability of Violating Weather Constraints ¹										
Day	10% Primary Concerns: Liftoff Winds										
Launch	Weather Conditions								Additional Risk Criteria ²		
	Weather/Visi	bility:	None / 7 mi.		Туре	Clouds Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low	
	Temp/Humid	ity:	69°F / 50%		Cirrus	Few	20,000	25,000	Booster Recovery Weather:	Moderate	
	Liftoff Winds	(200'):	020° 20 - 28	mph					Solar Activity:	High	
,	Probability of Violating Weather Constraints										
Delay	<5%	<5% Primary Concerns: None									
	Weather Conditions							Additional Risk Criteria			
24-Hour	Weather/Visibility: None / 7 mi.		Туре	Clouds Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low			
24	Temp/Humid	ity:	74°F / 65%		Cirrus	Scattered	20,000	25,000	Booster Recovery Weather:	Low	
	Liftoff Winds (200') : 050° 10 - 15 mph							Solar Activity:	Low		
Notes	1. The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring any random time during the launce. 2. Additional Risk Criteria, which are not included in the PoV, are mission-specific constraints that may not include all phenomena within each respectively.										
Ž	See https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf for more information										
Next Forecast Will Be Issued 17 Mar 2025											