



# Launch Mission Execution Forecast

**Mission:** Falcon 9 Starlink 10-30

**Issued:** 3 Aug 2025 / 1030L (1430Z)

**Valid:** 4 Aug 2025 / 0011-0411L (0411-0811Z)



**Forecast Discussion:** The low-pressure system with associated front has stalled and draped itself along southern Georgia. This system will continue to suppress the Bermuda High and keep the ridge axis to our south for today, which will keep us in a more southerly/southwesterly flow. Isolated thunderstorms and showers should be expected during the early to late afternoon hours that should dissipate much later this evening; however, slight instability and ample moisture still pose a chance for cumulus development in the overnight hours. The main concern for the primary launch window is cumulus and anvil cloud rules. The ridge will slowly begin to build back in on Monday as the low-pressure system marches northeast along the eastern seaboard and weakens, slightly decreasing probabilities of violation. This transitioning pattern of winds shifting more southeasterly will pose a risk of cumulus pushing in from the Atlantic during the launch window.

Launch Day	Probability of Violating Weather Constraints <sup>1</sup>							
	15%	Primary Concerns: Cumulus Cloud Rule, Anvil Cloud Rules						
	Weather Conditions					Additional Risk Criteria <sup>2</sup>		
	Weather/Visibility:	None / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low
	Temp/Humidity:	82°F / 88%	Cumulus	Scattered	2,500	8,000	Booster Recovery Weather:	Low
	Liftoff Winds (200’):	190° 10 - 15 mph	Cirrostratus	Few	25,000	30,000	Solar Activity:	Low
24-Hour Delay	Probability of Violating Weather Constraints							
	10%	Primary Concerns: Cumulus Cloud Rule						
	Weather Conditions					Additional Risk Criteria		
	Weather/Visibility:	None / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low
	Temp/Humidity:	82°F / 85%	Cumulus	Scattered	3,000	10,000	Booster Recovery Weather:	Low
	Liftoff Winds (200’):	170° 10 - 15 mph					Solar Activity:	Low
Notes	<div>1. The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring any random time during the launch window.</div> <div>2. Additional Risk Criteria, which are not included in the PoV, are mission-specific constraints that may not include all phenomena within each risk factor.</div> <div>See Launch FAQ <a href="https://45thweathersquadron.nebula.spaceforce.mil/pages/launchForecastSupport.html">https://45thweathersquadron.nebula.spaceforce.mil/pages/launchForecastSupport.html</a> for more information</div>							
Next Forecast Will Be Issued		As Required						