



Launch Mission Execution Forecast

Mission: Falcon 9 Starlink 10-29

Issued: 28 Jul 2025 / 1000L (1400Z)

Valid: 29 Jul / 2330L – 30 Jul / 2025 0330L
(30 / 0330 – 0730Z)



Forecast Discussion: The high pressure that has brought the unusual heat has moved well to the west into Louisiana and Texas, however high pressure well out near Bermuda will begin to build across the FL peninsula throughout the middle to end of this week. While we transition from one high pressure to another, moisture should begin to return to seasonably normal levels, bringing more typical rain and thunder chances to region. Storms in the interior will decay going into the overnight hours on Tuesday going into Wednesday and winds out of the S and SE should keep any threat during the window to lingering cumulus.

As the Bermuda High continues to build across the FL peninsula, low level winds shift slightly more S and SW increasing the probability that interior thunderstorms will push across the Spaceport into the overnight hours. Relatively weak surface and low-level winds combined with loss of daytime heating gives good confidence that storms will have decayed by the opening of the window.

Launch Day	Probability of Violating Weather Constraints ¹					
	10%	Primary Concerns: Cumulus Cloud Rule				
	Weather Conditions				Additional Risk Criteria ²	
	Weather/Visibility: None / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear: Low
	Temp/Humidity: 78°F / 90%	Cumulus	Few	2,000	4,500	Booster Recovery Weather: Low
24-Hour Delay	Liftoff Winds (200'): 160° 10 - 15 mph	Cirrus	Few	28,000	31,000	Solar Activity: Low
	Probability of Violating Weather Constraints					
	20%	Primary Concerns: Cumulus Cloud Rule, Anvil Cloud Rules				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility: None / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear: Low
Notes	Temp/Humidity: 76°F / 90%	Cumulus	Few	2,500	11,000	Booster Recovery Weather: Low
	Liftoff Winds (200'): 180° 10 – 15 mph	Cirrostratus	Few	22,000	28,000	Solar Activity: Low
	<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 https://45thweathersquadron.nebula.spaceforce.mil/pages/launchForecastSupport.html for more information</div>					
Next Forecast Will Be Issued		29 July 2025				