



Launch Mission Execution Forecast

Mission: Falcon 9 PSN N5

Issued: 8 September 2025 / 2145L (9/0145Z)

Valid: 9 September 2025 / 1951 – 2209L (2351 – 10/0209Z)



Forecast Discussion: Deep atmospheric moisture will remain in place across Florida through early to mid-week. This, combined with a stalled front across northern FL and periods of instability aloft, will continue elevated chances of showers and storms for the primary and backup launch opportunities. Wind gusts of 30 to 40 mph are possible near stronger storms. Instability aloft will be weaker on Wednesday. Therefore, the POV will be slightly lower for the backup launch opportunity.

Launch Day	Probability of Violating Weather Constraints ¹							
	85→70%	Primary Concerns: Cumulus Cloud Rule, Anvil Cloud Rules, Surface Electric Fields Rule						
	Weather Conditions					Additional Risk Criteria ²		
	Weather/Visibility:	T-storms / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low
	Temp/Humidity:	79°F / 88%	Cumulus	Broken	3,000	18,000	Booster Recovery Weather:	Low
24-Hour Delay	Liftoff Winds (200'):	060° 9 - 15 mph	Altostratus	Broken	20,000	24,000	Solar Activity:	Low
	Probability of Violating Weather Constraints							
	70→55%	Primary Concerns: Cumulus Cloud Rule, Anvil Cloud Rules, Surface Electric Fields Rule						
	Weather Conditions					Additional Risk Criteria		
	Weather/Visibility:	Sct T-storms / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low
Notes	Temp/Humidity:	78°F / 91%	Cumulus	Broken	3,000	15,000	Booster Recovery Weather:	Low
	Liftoff Winds (200'):	020° 8 - 13 mph	Altostratus	Broken	18,000	24,000	Solar Activity:	Low
	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.							
	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.							
	See Launch FAQ https://45thweathersquadron.nebula.spaceforce.mil/pages/launchForecastSupport.html for more information							
Next Forecast Will Be Issued		AS REQUIRED						