



Launch Mission Execution Forecast

Mission: Falcon 9 Starlink 10-27

Issued: 19 Sep 2025 / 1100L (1500Z)

Valid: 21 Sep 2025 / 0520 – 0920L (0920 – 1320Z)



Forecast Discussion: Below average rain chances are expected through this weekend and early next week as a deep plume of moisture lingering from South Florida to the Bahamas exits off to the northeast. Dry air in the mid-levels will continue to limit daily lightning chances. Isolated coastal showers are likely during both launch windows but will only be a distant concern for the flight through portion of the Cumulus Cloud Rule due to their expected low-topped nature.

Launch Day	Probability of Violating Weather Constraints ¹									
	10%	Primary Concerns: Cumulus Cloud Rule								
	Weather Conditions					Additional Risk Criteria ²				
	Weather/Visibility:	Iso Showers / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low		
	Temp/Humidity:	76°F / 90%	Cumulus	Scattered	2,000	5,000	Booster Recovery Weather:	Low		
	Liftoff Winds (200’):	040° 8 - 12 mph					Solar Activity:	Low		
24-Hour Delay	Probability of Violating Weather Constraints									
	15%	Primary Concerns: Cumulus Cloud Rule								
	Weather Conditions					Additional Risk Criteria				
	Weather/Visibility:	Iso Showers / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low		
	Temp/Humidity:	78°F / 90%	Cumulus	Scattered	2,000	5,000	Booster Recovery Weather:	Low		
	Liftoff Winds (200’):	050° 5 – 10 mph		Altostratus		Scattered	25,000	29,000	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 https://45thweathersquadron.nebula.spaceforce.mil/pages/launchForecastSupport.html for more information</div>									
Next Forecast Will Be Issued			20 Sep 2025							