



Launch Mission Execution Forecast



Mission: Falcon 9 Starlink 8-10

Issued: 30 Aug 2024 / 1600L (2200Z)

Valid: 31 Aug 2024 / 0139 – 0539L (0539 – 0939Z)

Forecast Discussion: High pressure across the Atlantic will remain further north for the end of the week, maintaining easterly flow across the Spaceport. This, and elevated moisture, will develop showers and thunderstorms off the coastal waters tonight, some of which could push onshore. The cumulus cloud rule remains the greatest POV for the primary launch window.

Easterly flow will help kickstart the east coast sea breeze Saturday morning, with multiple chances of showers and thunderstorms across the region through the afternoon. Some storms Saturday could create gusty winds of 40-50 mph. An approaching boundary, combined with the easterly flow, will create an increased chance of showers and thunderstorms Saturday night, making the cumulus cloud rule and the lightning rule the greatest POV for the backup window.

Launch Day	Probability of Violating Weather Constraints ¹					
	15%	Primary Concerns: Cumulus Cloud Rule				
	Weather Conditions				Additional Risk Criteria ²	
	Weather/Visibility: Iso Showers / 7 mi.	Clouds				Upper-Level Wind Shear: Low
Temp/Humidity: 78°F / 93%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low	
Liftoff Winds (200'): 110° 8 - 12 mph	Cumulus	Few	2,500	14,000	Solar Activity: Low	
24-Hour Delay	Probability of Violating Weather Constraints					
	30%	Primary Concerns: Cumulus Cloud Rule, Lightning Rule				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility: Sct Showers / 7 mi.	Clouds				Upper-Level Wind Shear: Low
Temp/Humidity: 78°F / 94%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low	
Liftoff Winds (200'): 140° 7 - 11 mph	Cumulus	Sct	2,500	15,000	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 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 https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf for more information					
Next Forecast Will Be Issued		As needed.				