



Launch Mission Execution Forecast



Mission: Falcon 9 Starlink 6-44

Issued: 12 Mar 2024 / 1030L (1430Z)

Valid: 13 Mar 2024 / 1929 – 2329L (2329 – 0329Z)

Forecast Discussion: High pressure will linger across the Southeastern US today with the ridge axis gradually drifting into the western Atlantic. Temperatures will continue to warm back to the upper 70s by midweek as flow shifts onshore. On Wednesday, a disturbance will form in the Gulf of Mexico and drag a weak boundary north through Central Florida by nighttime. While convective risks will remain low, mid-level clouds moving through the Spaceport may be some cause for concern for the initial launch window. Therefore, the primary weather concerns for a Wednesday evening launch will be for the Thick Cloud Layer Rule and Cumulus Cloud Rule.

On Thursday, the boundary will have cleared to our north, taking most of the mid-level moisture with it. Excellent weather is on tap for a launch attempt Thursday evening with the Cumulus Cloud Rule being only a distant concern.

		Probability of Violating Weather Constraints ¹				
Launch Day	40%	Primary Concerns: Thick Cloud Layer Rule, Cumulus Cloud Rule				
	Weather Conditions				Additional Risk Criteria ²	
	Weather/Visibility: Isold Showers / 7 mi.	Clouds			Upper-Level Wind Shear: Low-Mod	
	Temp/Humidity: 71°F / 75%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low
Liftoff Winds (200'): 160° 10 - 15 mph	Cumulus	Scattered	3,000	6,000	Solar Activity: Low	
	Altostatus	Broken	17,000	21,000		
	Cirrostratus	Broken	23,000	27,000		
		Probability of Violating Weather Constraints				
24-Hour Delay	5%	Primary Concerns: Cumulus Cloud Rule				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility: None / 7 mi.	Clouds			Upper-Level Wind Shear: Low-Mod	
	Temp/Humidity: 72°F / 80%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low
Liftoff Winds (200'): 130° 10 - 15 mph	Cumulus	Scattered	2,500	6,000	Solar Activity: Low	
	Cirrus	Scattered	30,000	34,000		
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 Required				