



Launch Mission Execution Forecast



Mission: Falcon 9 Starlink g12-2

Issued: 22 Dec 2024 / 0845L (1345Z)

Valid: 23 Dec 2024 / 0000 – 0400L (0500 – 0900Z)

Forecast Discussion: An inverted trough will develop and stall along the coast today, helping to generate isolated to scattered showers through early week. Showers near the area will prompt a chance of the Cumulus Cloud Rule being violated during the primary and backup launch windows. Additionally, mid-level clouds moving across the region will increase the POV during the backup window due to the Thick Cloud Layers Rule.

Launch Day		Probability of Violating Weather Constraints ¹				
Launch Day	40%	Primary Concerns: Cumulus Cloud Rule				
	Weather Conditions				Additional Risk Criteria ²	
	Weather/Visibility: Sct Showers / 7 mi.	Clouds			Upper-Level Wind Shear: Low	
	Temp/Humidity: 61°F / 89%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low
Liftoff Winds (200'): 060° 15 - 20 mph	Cumulus	Scattered	3,000	15,000	Solar Activity: Low	
	Cirrus	Few	25,000	30,000		
24-Hour Delay		Probability of Violating Weather Constraints				
24-Hour Delay	30%	Primary Concerns: Cumulus Cloud Rule, Thick Cloud Layers Rule				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility: Iso Showers / 7 mi.	Clouds			Upper-Level Wind Shear: Low	
	Temp/Humidity: 62°F / 93%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low-Mod
Liftoff Winds (200'): 010° 10 - 15 mph	Cumulus	Scattered	3,000	12,000	Solar Activity: Low	
	Altostratus	Scattered	19,000	28,000		
Notes	<ol style="list-style-type: none"> The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring any random time during the launch window. 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				