



Launch Mission Execution Forecast

Mission: Falcon 9 Starlink 10-52

Issued: 14 Oct 2025 / 0900L (1300Z)

Valid: 16 Oct 2025 / 0242 – 0642L (0642 – 1042Z)



Forecast Discussion: Large high pressure over the eastern half of the U.S. will persist through the week, resulting in very favorable conditions over the Space Coast. Northeasterly flow will slowly increase as the high slides southeast, resulting in some offshore low-topped showers that could reach the coast, but dry air aloft will inhibit most from reaching any significant altitude. Therefore, there is only a slight chance of violating the Cumulus Cloud Rule. Another round of reinforcing cool air is expected by Thursday evening drying out the low-levels once again, so there are no concerns for violation on the backup day. Recovery area conditions will continue to see high seas as pressure gradient remains tight, with slightly more favorable conditions for the backup day as high pressure builds in and winds begin to drop.

Launch Day	Probability of Violating Weather Constraints ¹				
	5%	Primary Concerns: Cumulus Cloud Rule			
	Weather Conditions				Additional Risk Criteria ²
	Weather/Visibility: None / 7 mi.	Clouds			Upper-Level Wind Shear: Low
	Temp/Humidity: 75°F / 75%	Type	Coverage	Base (ft)	Booster Recovery Weather: Mod
24-Hour Delay	Liftoff Winds (200'): 010° 14 - 22 mph				Solar Activity: Low
	Probability of Violating Weather Constraints				
	<5%	Primary Concerns: None			
	Weather Conditions				Additional Risk Criteria
	Weather/Visibility: None / 7 mi.	Clouds			Upper-Level Wind Shear: Low
Notes	Temp/Humidity: 74°F / 60%	Type	Coverage	Base (ft)	Booster Recovery Weather: Low-Mod
	Liftoff Winds (200'): 040° 12 - 20 mph				Solar Activity: High
	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		15 Oct 2025			