



Launch Mission Execution Forecast



Mission: Falcon 9 SES-24

Issued: 17 Jun 2024 / 1300L (1700Z)

Valid: 18 Jun 2024 / 1735 – 2024L (2135 – 19/0024Z)

Forecast Discussion: Predominant easterly surface flow continues over the Space Coast as the subtropical ridge axis remains over North Carolina and a tropical system develops in the western Gulf of Mexico. This prolonged onshore flow creates blustery conditions and ample low-level moisture for cumulus cloud and isolated shower development. Wind speeds may reach 25mph on the primary day, making Liftoff Winds and Cumulus Cloud Rule violations the primary concerns for tomorrow’s launch attempt.

For the backup day, conditions look very similar with gusty onshore winds and surface moisture. Impacts from an incoming Atlantic easterly wave are not expected to reach the Space Coast until Thursday, however, we do begin to see more moisture creeping into the mid-levels by Wednesday evening. This will increase our probability slightly for the backup day, as more cumulus clouds and shower activity are possible, along with breezy conditions.

Launch Day	Probability of Violating Weather Constraints ¹					
	45%	Primary Concerns: Liftoff Winds, Cumulus Cloud Rule, Lightning Rule				
	Weather Conditions				Additional Risk Criteria ²	
	Weather/Visibility: Isold Showers / 7 mi.	Clouds			Upper-Level Wind Shear: Low-Mod	
Temp/Humidity: 82°F / 68%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low	
Liftoff Winds (200'): 090° 20 - 25 mph	Cumulus	Scattered	3,000	8,000	Solar Activity: Low	
	Cirrus	Scattered	30,000	35,000		
24-Hour Delay	Probability of Violating Weather Constraints					
	55%	Primary Concerns: Liftoff Winds, Cumulus Cloud Rule, Lightning Rule				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility: Showers / 7 mi.	Clouds			Upper-Level Wind Shear: Low-Mod	
Temp/Humidity: 82°F / 80%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low-Mod	
Liftoff Winds (200'): 080° 20 - 25 mph	Cumulus	Scattered	3,000	15,000	Solar Activity: Low	
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 Needed				