



Launch Mission Execution Forecast



Mission: Falcon 9 Starlink g8-5

Issued: 2 Jun 2024 / 1130L (1530Z)

Valid: 4 Jun 2024 / 2004 – 2330L (5/0004 – 0330Z)

Forecast Discussion: Overall, weather conditions will be quite favorable for Tuesday evening’s launch attempt. An area of high pressure centered off the Carolina coast will bring persistent easterly flow in the low levels for the first half of the week. The onshore flow, combined with seasonably dry air, will limit the coverage of afternoon convection near the Space Coast. The showers and thunderstorms that do develop will be focused on the west coast of the Florida peninsula on Tuesday. The combination of the dry air and relatively weak winds in the upper levels will also limit the ability of any anvil clouds to make it back towards the east coast. Thus, the only concern is the small risk of a brief coastal shower coming off the Atlantic waters, invoking a slight Cumulus Cloud Rule risk.

Conditions will be similarly favorable for the backup window on Wednesday evening. Winds will shift slightly to the south, but will still have an easterly component that promotes the sea breeze front migrating well inland by the late afternoon and evening. The primary concern remains the low risk of a Cumulus Cloud Rule violation.

Launch Day		Probability of Violating Weather Constraints ¹					
Launch Day	10%	Primary Concerns: Cumulus Cloud Rule					
	Weather Conditions				Additional Risk Criteria ²		
	Weather/Visibility: None / 7 mi.	Clouds			Upper-Level Wind Shear: Low		
	Temp/Humidity: 80°F / 70%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low	
Liftoff Winds (200’): 100° 12 - 17 mph	Cumulus	Scattered	3,500	8,000	Solar Activity: Low		
24-Hour Delay		Probability of Violating Weather Constraints					
24-Hour Delay	10%	Primary Concerns: Cumulus Cloud Rule					
	Weather Conditions				Additional Risk Criteria		
	Weather/Visibility: None / 7 mi.	Clouds			Upper-Level Wind Shear: Low		
	Temp/Humidity: 80°F / 75%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low	
Liftoff Winds (200’): 130° 12 - 17 mph	Cumulus	Scattered	2,500	8,000	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		3 Jun 2024					