



# Launch Mission Execution Forecast

**Mission:** Falcon 9 NASA Crew-8

**Issued:** 1 Mar 2024 / 1200L (1700Z)

**Valid:** 2 Mar 2024 / 2311-2322L (3/0411-0422Z)



**Forecast Discussion:** Intermittent cloudiness today will give way to mostly cloudy skies with isolated showers on Saturday as the boundary waves back over the Spaceport. The primary launch weather concern for a Saturday evening attempt will be Flight Through Precipitation, the Cumulus Cloud Rule, and the Thick Cloud Layer Rule.

During the back-up launch window Sunday evening, most of the shower activity is expected to be displaced across the interior and western portions of the peninsula, but a few showers and mid-level clouds may persist locally. The main concerns for Sunday evening attempt will be Flight Through Precipitation and the Cumulus Cloud Rule.

On Monday evening, the stagnant pattern remains, therefore the primary launch weather concerns remain Flight Through Precipitation and the Cumulus Cloud Rule.

Launch Day	Probability of Violating Weather Constraints <sup>1</sup>					
	<b>60%</b>	Primary Concerns: Flight Through Precipitation, Thick Cloud Layer Rule, Cumulus Cloud Rule				
	Weather Conditions				Additional Risk Criteria <sup>2</sup>	
	<b>Weather/Visibility:</b> Showers / 7 mi.	<b>Clouds</b>			<b>Upper-Level Wind Shear:</b> Low	
	Type	Coverage	Base (ft)	Tops (ft)		
<b>Temp/Humidity:</b> 64°F / 100%	Cumulus	Scattered	3,000	12,000	<b>Ascent Corridor Weather:</b> Mod-High	
<b>Liftoff Winds (200'):</b> 110° 7 - 12 mph	Cirrostratus	Broken	25,000	32,000	<b>Solar Activity:</b> Low	
24-Hour Delay	Probability of Violating Weather Constraints					
	<b>25%</b>	Primary Concerns: Flight Through Precipitation, Cumulus Cloud Rule				
	Weather Conditions				Additional Risk Criteria	
	<b>Weather/Visibility:</b> None / 7 mi.	<b>Clouds</b>			<b>Upper-Level Wind Shear:</b> Low-Mod	
	Type	Coverage	Base (ft)	Tops (ft)		
<b>Temp/Humidity:</b> 65°F / 100%	Stratocumulus	Scattered	3,000	8,000	<b>Ascent Corridor Weather:</b> Low	
<b>Liftoff Winds (200'):</b> 060° 10 - 15 mph	Cirrostratus	Scattered	28,000	30,000	<b>Solar Activity:</b> Low	
48-Hour Delay	Probability of Violating Weather Constraints					
	<b>30%</b>	Primary Concerns: Flight Through Precipitation, Cumulus Cloud Rule				
	Weather Conditions				Additional Risk Criteria	
	<b>Weather/Visibility:</b> None / 7 mi.	<b>Clouds</b>			<b>Upper-Level Wind Shear:</b> Low	
	Type	Coverage	Base (ft)	Tops (ft)		
<b>Temp/Humidity:</b> 67°F / 90%	Cumulus	Scattered	3,000	8,000	<b>Ascent Corridor Weather:</b> Low	
<b>Liftoff Winds (200'):</b> 100° 10 - 15 mph	Cirrostratus	Scattered	28,000	30,000	<b>Solar Activity:</b> Low	
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 <a href="https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf">https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf</a> for more information						

**Next Forecast Will Be Issued** As Required