



# Launch Mission Execution Forecast

**Mission:** Falcon 9 GlobalStar-FM15

**Issued:** 18 Jun 2022 / 1000L (1400Z)

**Valid:** 19 Jun 2022 / 0025 – 0035L (0425 – 0435Z)



**Forecast Discussion:** A hot and stormy day is in store for the Spaceport as a weak surface boundary pushes into the state. Expect storm initiation to begin in the early afternoon, with some cells becoming strong to severe before dying down after sunset. While most of the thunderstorm activity will be long gone as we enter the midnight hour, some mid-level clouds with remnant electrical charge may be left behind. The main concern for the primary window will be the Cumulus Cloud Rule and Surface Electric Field Rule.

On Sunday, the boundary lingers across the Florida Peninsula, but shower coverage should be lower across the Spaceport with the main precip shield displaced to the south. This leaves less remnant cloud cover behind for the backup launch window. Therefore, the Probability of Violation for a Monday morning launch attempt is lower, with the Cumulus Cloud Rule and Surface Electric Field Rule being the main concerns.

		Probability of Violating Weather Constraints <sup>1</sup>				
<b>Launch Day</b>	<b>40%</b>	<b>Primary Concerns:</b> Cumulus Cloud Rule, Surface Electric Field Rule				
	Weather Conditions				Additional Risk Criteria <sup>2</sup>	
	<b>Weather/Visibility:</b> Iso Showers / 7 mi.	<b>Clouds</b>			<b>Upper-Level Wind Shear:</b> Low	
	<b>Temp/Humidity:</b> 77°F / 90%	Type	Coverage	Base (ft)	Tops (ft)	<b>Booster Recovery Weather:</b> Low-Mod
<b>Liftoff Winds (200'):</b> 220° 12 - 17 mph	Cumulus	Scattered	5,000	9,000	<b>Solar Activity:</b> Low	
	Altocumulus	Scattered	18,000	22,000		
		Probability of Violating Weather Constraints				
<b>24-Hour Delay</b>	<b>20%</b>	<b>Primary Concerns:</b> Cumulus Cloud Rule, Surface Electric Field Rule				
	Weather Conditions				Additional Risk Criteria	
	<b>Weather/Visibility:</b> Iso Showers / 7 mi.	<b>Clouds</b>			<b>Upper-Level Wind Shear:</b> Mod	
	<b>Temp/Humidity:</b> 77°F / 90%	Type	Coverage	Base (ft)	Tops (ft)	<b>Booster Recovery Weather:</b> Low
<b>Liftoff Winds (200'):</b> 080° 15 – 20 mph	Cumulus	Scattered	4,000	8,000	<b>Solar Activity:</b> Low	
<b>Notes</b>	1. The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring anytime 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				
<b>Next Forecast Will Be Issued</b>		As Required				