



# Launch Mission Execution Forecast



**Mission:** Falcon 9 Transporter-6

**Issued:** 01 Jan 2023 / 0930L (1430Z)

**Valid:** 03 Jan 2023 / 0956 – 0957L (1456 – 1457Z)

**Forecast Discussion:** High pressure will build in throughout the day today before another frontal system is anticipated to reach the Spaceport late Wednesday into early Thursday. Ahead of the front, a stronger pressure gradient will raise wind speeds, and as the high center moves off farther into the Atlantic winds will shift to become southeasterly. Weather concerns for the primary launch attempt are the Cumulus Cloud Rule due to a chance for fast, onshore-moving Atlantic showers as well as Liftoff Winds.

Should the launch push to the backup opportunity, the front will be located along the panhandle of Florida and expected to affect Central Florida by Wednesday evening. With an even stronger pressure gradient, wind speeds will increase further, and wind direction will shift to become southwesterly. Concerns for violating the Cumulus Cloud Rule drop off on Wednesday, and Liftoff Winds are expected to be the primary threat for launch.

<b>Launch Day</b>	<b>Probability of Violating Weather Constraints<sup>1</sup></b>					
	<b>20%</b>	<b>Primary Concerns:</b> Cumulus Cloud Rule, Liftoff Winds				
	<b>Weather Conditions</b>				<b>Additional Risk Criteria<sup>2</sup></b>	
	<b>Weather/Visibility:</b> Isold Showers / 7 mi.	<b>Clouds</b>				<b>Upper-Level Wind Shear:</b> Low
	Type	Coverage	Base (ft)	Tops (ft)		
<b>Temp/Humidity:</b> 72°F / 80%	Cumulus	Scattered	2,500	6,000	<b>Solar Activity:</b> Low	
<b>Liftoff Winds (200'):</b> 150° 20 - 25 mph						
<b>24-Hour Delay</b>	<b>Probability of Violating Weather Constraints</b>					
	<b>20%</b>	<b>Primary Concerns:</b> Liftoff Winds				
	<b>Weather Conditions</b>				<b>Additional Risk Criteria</b>	
	<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> 70°F / 90%	Cumulus	Few	2,000	4,500	<b>Solar Activity:</b> Low	
<b>Liftoff Winds (200'):</b> 200° 25 - 30 mph	Cirrus	Scattered	30,000	33,000		
<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>		02 JAN 2023				