



# Launch Mission Execution Forecast



**Mission:** Falcon 9 Bandwagon-1

**Issued:** 06 Apr 2024 / 0930L (1330Z)

**Valid:** 07 Apr 2024 / 1912 – 1922L (2312 – 2322Z)

**Forecast Discussion:** Strong upper-level ridging is present over the Central Plains today and will push into the SE CONUS throughout the day. This will bring in dry conditions and keep precipitation chances to a minimum. A surface high-pressure center will drape over the Carolina-Georgia coastline by the primary launch window, causing light northeasterly winds and benign weather conditions. A broken deck of upper-level cirrus may cause a Thick Cloud Layer violation, should it dip down to the -20C altitude.

For the backup day, wind speeds increase slightly, and become more easterly creating a small chance for a Cumulus Cloud Rule violation with onshore flow. Overall, conditions look very favorable for both the primary and backup windows.

		Probability of Violating Weather Constraints <sup>1</sup>																			
<b>Launch Day</b>	<b>&lt;5%</b>	Primary Concerns: Thick Cloud Layers Rule																			
	Weather Conditions			Additional Risk Criteria <sup>2</sup>																	
	<b>Weather/Visibility:</b> None / 7 mi.	<table border="1"> <thead> <tr> <th colspan="4">Clouds</th> </tr> <tr> <th>Type</th> <th>Coverage</th> <th>Base (ft)</th> <th>Tops (ft)</th> </tr> </thead> <tbody> <tr> <td>Cumulus</td> <td>Few</td> <td>5,000</td> <td>7,000</td> </tr> <tr> <td>Cirrus</td> <td>Broken</td> <td>25,000</td> <td>40,000</td> </tr> </tbody> </table>			Clouds				Type	Coverage	Base (ft)	Tops (ft)	Cumulus	Few	5,000	7,000	Cirrus	Broken	25,000	40,000	<b>Upper-Level Wind Shear:</b> Low
	Clouds																				
Type	Coverage	Base (ft)	Tops (ft)																		
Cumulus	Few	5,000	7,000																		
Cirrus	Broken	25,000	40,000																		
<b>Temp/Humidity:</b> 66°F / 60%				<b>Booster Recovery Weather:</b> Low																	
<b>Liftoff Winds (200'):</b> 050° 10 - 12 mph				<b>Solar Activity:</b> Low																	
		Probability of Violating Weather Constraints																			
<b>24-Hour Delay</b>	<b>&lt;5%</b>	Primary Concerns: Cumulus Cloud Rule																			
	Weather Conditions			Additional Risk Criteria																	
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Cumulus	Few	5,000	7,000																		
<b>Temp/Humidity:</b> 71°F / 60%				<b>Booster Recovery Weather:</b> Low																	
<b>Liftoff Winds (200'):</b> 120° 13 – 18 mph				<b>Solar Activity:</b> Low																	
<b>Notes</b>	<ol style="list-style-type: none"> <li>The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring any random time during the launch window.</li> <li>Additional Risk Criteria, which are not included in the PoV, are mission-specific constraints that may not include all phenomena within each risk factor.</li> </ol>																				
	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 Needed																			