



# Launch Mission Execution Forecast



**Mission:** Falcon 9 Starlink 6-41

**Issued:** 03 Mar 2024 / 1630L (2130Z)

**Valid:** 04 Mar 2024 / 1854 – 2254L (2354 – 05 / 0354Z)

**Forecast Discussion:** A weak frontal boundary will remain within the vicinity of Central Florida through Monday, keeping warm temperatures and moist conditions in place. Isolated showers and thunderstorms will be possible generally during daylight hours, with activity waning overnight. During the initial launch window Monday evening, any convective activity remaining is expected to be displaced across the interior and western portions of the peninsula, but a few showers and lingering anvils may persist locally. The main concerns for the primary launch window will be for the Cumulus Cloud Rule and the Anvil Cloud Rules.

On Tuesday, moisture will be on the rise as a mid-level trough moves across the Southeast US, possibly forming a surface low along the boundary. Jet dynamics will be a bit more pronounced and shower/storm coverage will be on the increase Tuesday evening. Therefore, a higher POV is indicated for a Tuesday night attempt, with the same weather rule concerns.

Launch Day		Probability of Violating Weather Constraints <sup>1</sup>					
		<b>20%</b>	Primary Concerns: Cumulus Cloud Rule, Anvil Cloud Rules				
		Weather Conditions				Additional Risk Criteria <sup>2</sup>	
		<b>Weather/Visibility:</b> Isold Showers / 7 mi.	<b>Clouds</b>				<b>Upper-Level Wind Shear:</b> Low-Mod
			Type	Coverage	Base (ft)	Tops (ft)	<b>Booster Recovery Weather:</b> Low
		<b>Temp/Humidity:</b> 68°F / 90%	Cumulus	Scattered	2,000	10,000	<b>Solar Activity:</b> Low
		<b>Liftoff Winds (200'):</b> 070° 10 - 15 mph	Stratocumulus	Scattered	18,000	22,000	
24-Hour Delay		Probability of Violating Weather Constraints					
		<b>45%</b>	Primary Concerns: Cumulus Cloud Rule, Anvil Cloud Rules				
		Weather Conditions				Additional Risk Criteria	
		<b>Weather/Visibility:</b> Sct Showers / 7 mi.	<b>Clouds</b>				<b>Upper-Level Wind Shear:</b> Low-Mod
			Type	Coverage	Base (ft)	Tops (ft)	<b>Booster Recovery Weather:</b> Low
		<b>Temp/Humidity:</b> 68°F / 90%	Cumulus	Scattered	2,000	12,000	<b>Solar Activity:</b> Low
		<b>Liftoff Winds (200'):</b> 130° 15 - 20 mph	Stratocumulus	Broken	16,000	20,000	
Notes	<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						
Next Forecast Will Be Issued		As Required					