



# Launch Mission Execution Forecast

**Mission:** Falcon 9 Starlink 5-15

**Issued:** 14 Jul 2023 / 2200L (15/0200Z)

**Valid:** 15 Jul 2023 / 2340 – 16/0000L (16/0340 – 0400Z)



**Forecast Discussion:** East Central Florida will remain in an active pattern as we head into the weekend, but the overnight launch window will allow for generally favorable launch weather conditions. The Atlantic ridge axis will remain to our south tomorrow, and the low-level offshore flow combined with plentiful moisture will lead to another round of afternoon thunderstorms along the east coast. However, the showers and storms will dissipate after sunset and as we head into the overnight hours. The primary concerns include the Anvil Cloud Rules associated with lingering cloud cover from the storms, and the Cumulus Cloud Rule for any showers that develop along remnant outflow boundaries.

Sunday will likely be a very similar day to Saturday, with another round of afternoon thunderstorms that die out in the overnight hours. Thus, the probability of violation and primary concerns are the same as Saturday night's attempt.

		Probability of Violating Weather Constraints <sup>1</sup>				
<b>Launch Day</b>	<b>15%</b>	Primary Concerns: Anvil Cloud Rules, Cumulus Cloud Rule				
	Weather Conditions				Additional Risk Criteria <sup>2</sup>	
	<b>Weather/Visibility:</b> None / 7 mi.	<b>Clouds</b>			<b>Upper-Level Wind Shear:</b>	Low
	<b>Temp/Humidity:</b> 79°F / 90%	Type	Coverage	Base (ft)	Tops (ft)	<b>Booster Recovery Weather:</b> Low
<b>Liftoff Winds (200'):</b> 210° 12 - 17 mph	Cumulus	Scattered	3,000	8,000	<b>Solar Activity:</b> Low	
	Cirrostratus	Broken	32,000	36,000		
		Probability of Violating Weather Constraints				
<b>24-Hour Delay</b>	<b>15%</b>	Primary Concerns: Anvil Cloud Rules, 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
	<b>Temp/Humidity:</b> 81°F / 85%	Type	Coverage	Base (ft)	Tops (ft)	<b>Booster Recovery Weather:</b> Low
<b>Liftoff Winds (200'):</b> 250° 10 - 15 mph	Cumulus	Scattered	3,000	8,000	<b>Solar Activity:</b> Low	
	Cirrostratus	Scattered	30,000	34,000		
<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 Required				