



# Launch Mission Execution Forecast

**Mission:** Falcon 9 Starlink 6-55

**Issued:** 01 May 2024 / 1330L (1730Z)

**Valid:** 02 May 2024 / 2117L – 03/0117L (0117 – 0517Z)



**Forecast Discussion:** High pressure over the western Atlantic is dominating the Southeastern United States and Florida Peninsula, keeping the upper-levels relatively dry. With the ridge axis to our north, onshore, southeasterly flow will continue along the Space Coast causing moist lower levels.

Today, thunderstorm activity is present over the Gulf Stream, and a sea breeze is developing over the Treasure Coast with showers beginning to form. The East and West Coast Sea Breezes are expected to collide over west-central Florida this evening, causing potential for lightning and anvil development into tonight.

Overall conditions look very similar for tomorrow. Surface winds will be onshore, and the East and West Coast Sea Breezes are expected to develop and collide in the evening. Upper-level winds remain weak out of the northwest, reaching only about 35-40kts. Anvil development from these thunderstorms may extend far enough eastward to impact the Space Coast but that is not likely.

For the backup day, conditions look favorable with the primary concern being the Cumulus Cloud Rule. Onshore surface winds will continue and be slightly elevated compared to the primary day.

Probability of Violating Weather Constraints <sup>1</sup>																													
<b>Launch Day</b>	<b>15%</b> Primary Concerns: Cumulus Cloud Rule, Attached Anvil Cloud Rule																												
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<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																												