



# Launch Mission Execution Forecast

**Mission:** Falcon 9 2017

**Issued:** 26 Apr 2024 / 0900L (1300Z)

**Valid:** 27 Apr 2024 / 2029 – 2040L (28/0029 – 0040Z)



**Forecast Discussion:** The overall pattern will begin to shift today as a broad area of high pressure centered in the Northeast strengthens and extends southwards along the eastern seaboard. This will cause the pressure gradient to tighten heading into the weekend, bringing breezy easterly winds tomorrow. A brief, coastal shower cannot be ruled out due to the deep onshore flow, but dry air in the mid-levels should help cap off any significant vertical development. Additionally, there will be increasing upper-level cloud cover as Saturday evening progresses, introducing a thick cloud layer concern. However, these clouds will likely remain cold enough to avoid a significant violation threat. This all adds up to a probability of violation of 25% for Saturday evening’s launch attempt with the primary concerns being the Cumulus Cloud Rule, Thick Cloud Layers Rule, and Liftoff Winds.

For the backup day, the pattern will remain very similar to Saturday, with the only minor differences being slightly lower wind speeds and the upper-level cloud cover being at a slightly lower altitude. The POV is marginally lower at 20% with the Cumulus Cloud and Thick Cloud Layers rules again being the primary concerns.

Probability of Violating Weather Constraints <sup>1</sup>																													
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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 Required																												