



Launch Mission Execution Forecast



Mission: Falcon 9 SES-24

Issued: 19 Jun 2024 / 1620L (2020Z)

Valid: 20 Jun 2024 / 1735 – 2024L (2135 – 21/0024Z)

Forecast Discussion: The primary weather watch item continues to be the timing of the tropical easterly wave which is currently sitting a few hundred miles east of the Bahamas. Significant moisture, shower activity and potential thunderstorm development is expected upon its arrival to the north of the Space Coast on Thursday night into Friday morning.

For the Thursday evening launch attempt, surface winds will be northeasterly and sporadic bands of showers are expected off the Atlantic. A drastic increase in moisture throughout the levels is expected by about 2200L on Thursday night and will continue overnight and into most of Friday. The primary concern will be the Cumulus Cloud Rule, with Anvil Cloud Rules and Lightning Rule violations possible with any convective activity within onshore-moving rain bands. Overall, conditions will likely worsen throughout the window on Thursday evening, and continue overnight into Friday.

On Friday evening, winds will shift southeasterly as the center of tropical circulation passes north of the Space Coast. Subsidence behind the tropical wave will provide more favorable conditions, leaving the Cumulus Cloud Rule as the primary concern for the backup day.

Probability of Violating Weather Constraints ¹																																				
Launch Day	40%→60% Primary Concerns: Cumulus Cloud Rule, Anvil Rules, Lightning Rule																																			
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24-Hour Delay	20% Primary Concerns: Cumulus Cloud Rule																																			
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Notes	<ol style="list-style-type: none"> The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring any random time during the launch window. Additional Risk Criteria, which are not included in the PoV, are mission-specific constraints that may not include all phenomena within each risk factor. <p>See https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf for more information</p>																																			
Next Forecast Will Be Issued	As Needed																																			