



Launch Mission Execution Forecast



Mission: Falcon 9 Starlink 10-31

Issued: 20-May-26 / 0900L (1300Z)

Valid: 21-May-26 / 0526 – 0926L (0926 – 1326Z)
22-May-26 / 0504 – 0904L (0904 – 1304Z)

Forecast Discussion: No major changes were made to the forecast today. An Atlantic surface high pressure nosed over southeast US continues to drive our local weather pattern. This feature will promote gentle to moderate east to southeasterly flow leading up to the day of launch. Despite this flow promoting moisture advection from the Atlantic, peak rain chances will be focused inland during the afternoon hours while the sea breeze boundary is displaced away from the east coast. A slow-moving disturbance over the Bahamas is helping supply this moisture and may also generate some convection in the early morning hours. These showers and associated clouds will be our main concern for violation of weather constraints on both the main and backup windows with focus on the Cumulus Cloud Rule. The latest high-resolution model runs currently note very little development of showers near T-0 leading to a slight improvement in POV values.

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|---|---|---|-----------------|------------------|---|--------------------------------------|
| Launch Day | Probability of Violating Weather Constraints¹ | | | | | |
| | 10% | Primary Concerns: Cumulus Cloud Rule | | | | |
| | Weather Conditions | | | | Additional Risk Criteria² | |
| | Weather/Visibility: Isol Showers / 7+ mi | Type | Coverage | Base (ft) | Tops (ft) | Booster Recovery Weather: Low |
| Temp/Humidity: 77°F / 83% | Cumulus | Scattered | 2,000 | 14,000 | Solar Activity: Low | |
| Liftoff Winds (200'): 130° 11 - 16 mph | | | | | | |

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|---|---|---|-----------------|------------------|---------------------------------|--------------------------------------|
| 24-Hour Delay | Probability of Violating Weather Constraints¹ | | | | | |
| | 15% | Primary Concerns: Cumulus Cloud Rule | | | | |
| | Weather Conditions | | | | Additional Risk Criteria | |
| | Weather/Visibility: Isol Showers / 7+ mi | Type | Coverage | Base (ft) | Tops (ft) | Booster Recovery Weather: Low |
| Temp/Humidity: 78°F / 81% | Cumulus | Scattered | 2,000 | 15,000 | Solar Activity: Low | |
| Liftoff Winds (200'): 140° 14 - 19 mph | | | | | | |

Notes

- The Probability of Violation (PoV) is the chance of a range or customer constraint violation occurring at 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.*

See Launch FAQ <https://45thweathersquadron.nebula.spaceforce.mil/pages/launchForecastSupport.html> for more information

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| Next Forecast Will Be Issued | As Required |
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