



Launch Mission Execution Forecast



Mission: Falcon 9 Starlink 6-25

Issued: 29 Oct 2023 / 2100L (30/0100Z)

Valid: 30 Oct 2023 / 1823 – 2223L (2223 – 31/0223Z)

Forecast Discussion: A surface ridge extends across the southeast US while a weak area of low pressure slowly drifts northwestward through the Bahamas. Little change in local weather is anticipated Monday, but a cold front will move rapidly southeast out of the Tennessee Valley and towards Florida by late Tuesday. Atmospheric moisture remains shallow but sufficient to bring some cumulus clouds onto the coast from the neighboring Atlantic the next couple of days. These clouds are the main weather concern for the primary and backup launch opportunities.

Probability of Violating Weather Constraints ¹																													
Launch Day	5% Primary Concerns: Cumulus Cloud Rule																												
	Weather Conditions																												
	<table border="0" style="width: 100%;"> <tr> <td style="width: 30%;">Weather/Visibility: None / 7 mi.</td> <td style="width: 30%;"></td> <td style="width: 20%; text-align: center;">Clouds</td> <td style="width: 20%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;">Upper-Level Wind Shear: Low</td> </tr> <tr> <td></td> <td style="text-align: center;">Type</td> <td style="text-align: center;">Coverage</td> <td style="text-align: center;">Base (ft)</td> <td style="text-align: center;">Tops (ft)</td> <td></td> <td></td> </tr> <tr> <td>Temp/Humidity: 75°F / 75%</td> <td style="text-align: center;">Cumulus</td> <td style="text-align: center;">Few</td> <td style="text-align: center;">3,000</td> <td style="text-align: center;">9,000</td> <td></td> <td>Booster Recovery Weather: Low</td> </tr> <tr> <td>Liftoff Winds (200'): 050° 10 - 15 mph</td> <td style="text-align: center;">Cirrus</td> <td style="text-align: center;">Scattered</td> <td style="text-align: center;">25,000</td> <td style="text-align: center;">30,000</td> <td></td> <td>Solar Activity: Low</td> </tr> </table>	Weather/Visibility: None / 7 mi.		Clouds				Upper-Level Wind Shear: Low		Type	Coverage	Base (ft)	Tops (ft)			Temp/Humidity: 75°F / 75%	Cumulus	Few	3,000	9,000		Booster Recovery Weather: Low	Liftoff Winds (200'): 050° 10 - 15 mph	Cirrus	Scattered	25,000	30,000		Solar Activity: Low
	Weather/Visibility: None / 7 mi.		Clouds				Upper-Level Wind Shear: Low																						
	Type	Coverage	Base (ft)	Tops (ft)																									
Temp/Humidity: 75°F / 75%	Cumulus	Few	3,000	9,000		Booster Recovery Weather: Low																							
Liftoff Winds (200'): 050° 10 - 15 mph	Cirrus	Scattered	25,000	30,000		Solar Activity: Low																							
Additional Risk Criteria ²																													
Probability of Violating Weather Constraints																													
24-Hour Delay	10% Primary Concerns: Cumulus Cloud Rule																												
	Weather Conditions																												
	<table border="0" style="width: 100%;"> <tr> <td style="width: 30%;">Weather/Visibility: None / 7 mi.</td> <td style="width: 30%;"></td> <td style="width: 20%; text-align: center;">Clouds</td> <td style="width: 20%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;">Upper-Level Wind Shear: Low</td> </tr> <tr> <td></td> <td style="text-align: center;">Type</td> <td style="text-align: center;">Coverage</td> <td style="text-align: center;">Base (ft)</td> <td style="text-align: center;">Tops (ft)</td> <td></td> <td></td> </tr> <tr> <td>Temp/Humidity: 76°F / 80%</td> <td style="text-align: center;">Cumulus</td> <td style="text-align: center;">Scattered</td> <td style="text-align: center;">3,000</td> <td style="text-align: center;">10,000</td> <td></td> <td>Booster Recovery Weather: Low</td> </tr> <tr> <td>Liftoff Winds (200'): 010° 10 - 15 mph</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Solar Activity: Low</td> </tr> </table>	Weather/Visibility: None / 7 mi.		Clouds				Upper-Level Wind Shear: Low		Type	Coverage	Base (ft)	Tops (ft)			Temp/Humidity: 76°F / 80%	Cumulus	Scattered	3,000	10,000		Booster Recovery Weather: Low	Liftoff Winds (200'): 010° 10 - 15 mph						Solar Activity: Low
	Weather/Visibility: None / 7 mi.		Clouds				Upper-Level Wind Shear: Low																						
	Type	Coverage	Base (ft)	Tops (ft)																									
Temp/Humidity: 76°F / 80%	Cumulus	Scattered	3,000	10,000		Booster Recovery Weather: Low																							
Liftoff Winds (200'): 010° 10 - 15 mph						Solar Activity: Low																							
Additional Risk Criteria																													
Notes	<ol style="list-style-type: none"> 1. The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring any random time during the launch window. 2. 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 https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf for more information																												
Next Forecast Will Be Issued	As Required																												