



Launch Mission Execution Forecast



Mission: Falcon 9 Starlink 4-36

Issued: 17 October 2022 / 1000L (1400Z)

Valid: 20 October 2022 / 1045 – 1502L (1445-1902Z)

Forecast Discussion: A large frontal system will slowly make its way through Florida over the next few days bringing lots of cloud cover as well as isolated showers and thunderstorms. The system should push south of Central Florida by late Tuesday and conditions will improve through the day Wednesday. On Thursday, a wave is forecast to form on the boundary in the vicinity of the Bahamas, bringing the clouds and rain back north along the Southeast Coast of Florida. The primary weather concern for a launch attempt Thursday is the Cumulus Cloud Rule associated with the wave.

On Friday, the wave will begin to push north, bringing clouds and showers closer to the Spaceport and nearshore waters as well as increasing the northerly winds. The main weather concerns are the Cumulus Cloud Rule with the addition of Liftoff Winds given the proximity of the wave.

		Probability of Violating Weather Constraints ¹				
Launch Day	20%	Primary Concerns: Cumulus Cloud Rule				
	Weather Conditions				Additional Risk Criteria ²	
	Weather/Visibility: None / 7 mi.	Clouds			Upper-Level Wind Shear: Low	
	Temp/Humidity: 81°F / 88%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low
Liftoff Winds (200'): 010° 10 - 15 mph	Cumulus	Few	3,000	15,000	Solar Activity: Low	
	Altocumulus	Scattered	12,000	15,000		
		Probability of Violating Weather Constraints				
24-Hour Delay	30%	Primary Concerns: Cumulus Cloud Rule, Liftoff Winds				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility: Isold Showers / 7 mi.	Clouds			Upper-Level Wind Shear: Low	
	Temp/Humidity: 82°F / 85%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low
Liftoff Winds (200'): 020° 15 - 20 mph	Cumulus	Scattered	3,000	18,000	Solar Activity: Low	
	Altocumulus	Scattered	12,000	15,000		
Notes	1. The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring anytime 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		18 October 2022				