



Launch Mission Execution Forecast



Mission: Falcon 9 Starlink 6-4

Issued: 3 June 2023 / 0630L (1030Z)

Valid: 4 Jun 2023 / 0548-0841L (0948-1241Z)

Forecast Discussion: The rapidly weakening TS Arlene near the NW coast of Cuba is forecast to dissipate into tonight, with a second trough developing north of the Bahamas. The changes in sensible weather across the Spaceport will be minimal with abundant moisture and upper-level trough still in place. There will be periods of onshore moving showers and storms, with the highest coverage in the first half of the day, before activity focuses more inland in the afternoon. The model trend has been for a little less precipitation coverage going into Sunday as another weak low develops along the second trough and backs winds more NNW, or offshore. However, there will still be quite a bit of moisture around and passing clouds and showers can't be ruled out for the primary launch window Sunday morning.

High pressure settling into the southeastern US will push a weak boundary through Monday morning, which will likely be transiting the area during the backup launch window. This will bring a push of showers and storms and increasing north-northeast flow through the window.

Launch Day		Probability of Violating Weather Constraints ¹							
		50%	Primary Concerns: Cumulus Cloud Rule, Surface Electric Fields Rule						
		Weather Conditions				Additional Risk Criteria ²			
		Weather/Visibility:	Sct Showers / 7 mi.	Clouds			Upper-Level Wind Shear:	Low	
			Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather:	Low	
		Temp/Humidity:	73°F / 82%	Cumulus	Scattered	2,500	12,000	Solar Activity:	Low
		Liftoff Winds (200'):	330° 5 - 10 mph	Altostratus	Broken	18,000	22,000		
24-Hour Delay		Probability of Violating Weather Constraints							
		60%	Primary Concerns: Cumulus Cloud Rule, Surface Electric Fields Rule						
		Weather Conditions				Additional Risk Criteria			
		Weather/Visibility:	Sct Showers / 7 mi.	Clouds			Upper-Level Wind Shear:	Low	
			Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather:	Low	
		Temp/Humidity:	74°F / 80%	Cumulus	Scattered	2,500	10,000	Solar Activity:	Low
		Liftoff Winds (200'):	020° 15 - 20 mph	Altostratus	Broken	16,000	20,000		
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. 								
	See https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf for more information								
Next Forecast Will Be Issued		As Needed							