



Launch Mission Execution Forecast

Mission: Falcon 9 Starlink 6-5

Issued: 8 July 2023 / 0830L (1230Z)

Valid: 9 July 2023 / 0416 – 0819L (0816 – 1219Z)



Forecast Discussion: There's been little change in the broader synoptic pattern over the past few days as the western Atlantic ridge axis remains south of the state, and prevailing southwesterly flow across the Spaceport. Weather today should play out not to dissimilar from yesterday, with early morning storms along the Gulf coast pushing eastwards into the area by early afternoon as well as an active Gulf breeze arriving later into the afternoon. Like the past few days, this brings a few strong storms and heavy rain to the Spaceport. Most convection will end or push offshore within an hour or two of sunset, leaving leftover clouds that will dissipate through the late evening hours. Overall quiet weather is expected for the primary launch window early Sunday morning as offshore flow keeps most nocturnal showers offshore.

Weather repeats for the remainder of Sunday with few changes in the pattern. The earlier timeframe for the backup window Sunday evening means a higher threat for surviving showers or storms in the vicinity as well as remnant anvils from earlier activity. These should diminish through the window with a lower threat by late evening.

Launch Day	Probability of Violating Weather Constraints ¹						
	10%	Primary Concerns: Anvil Cloud Rules					
	Weather Conditions				Additional Risk Criteria ²		
	Weather/Visibility:	None / 7 mi.	Clouds			Upper-Level Wind Shear:	Low
		Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather:	Low
Temp/Humidity:	79°F / 94%	Cumulus	Scattered	2,500	6,000	Solar Activity:	Low
Liftoff Winds (200'):	250° 10 - 15 mph	Cirrostratus	Scattered	19,000	25,000		
12-Hour Delay	Probability of Violating Weather Constraints						
	50%→10%	Primary Concerns: Anvil Cloud Rules, Cumulus Cloud Rule					
	Weather Conditions				Additional Risk Criteria		
	Weather/Visibility:	None / 7 mi.	Clouds			Upper-Level Wind Shear:	Low
		Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather:	Low
Temp/Humidity:	82°F / 88%	Cumulus	Scattered	3,000	9,000	Solar Activity:	Low
Liftoff Winds (200'):	220° 10 - 15 mph	Cirrostratus	Broken	18,000	25,000		
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					