



Launch Mission Execution Forecast

Mission: Falcon 9 NASA Crew-6

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Forecast Discussion: A low pressure system is moving through the Great Plains as high pressure builds back into Florida and the ascent corridor. Through the day Wednesday, this low pressure area will move into the Ohio Valley and strengthen as the high pressure ridge slides east of the ascent corridor. By launch time early Thursday morning, the ridge will extend from South Florida to Bermuda, creating moderate winds in the staging area due to the pressure gradient between the ridge and a low-pressure area. Launch weather remains favorable with only a very slight chance of a shower developing over the pad at launch time.

Through the day Thursday and Friday, a stronger low pressure area will develop in Texas and move steadily across the U.S., progressively enhancing the winds and cloud cover from Florida through the Mid-Atlantic States. The primary weather concerns for both the 24 and 48 hour delay attempts will be continuously increasing winds in the staging area and to a lesser degree the spaceport.

Launch Day		Probability of Violating Weather Constraints ¹						
Launch Day	5%	Primary Concerns: Flight Through Precipitation						
	Weather Conditions				Additional Risk Criteria ²			
	Weather:	None	Clouds				Upper-Level Wind Shear:	Low-Mod
			Type	Coverage	Base (ft)	Tops (ft)		
	Visibility:	7 miles	Cumulus	Few	3,000	8,000	Ascent Corridor Recovery:	Moderate
Temp/Humidity:	72°F / 82%					Booster Recovery Weather:	Low-Mod	
Liftoff Winds (200'):	200° 8 - 13 mph					Solar Activity:	Low	
24-Hour Delay		Probability of Violating Weather Constraints						
24-Hour Delay	30%	Primary Concerns: Liftoff Winds, Flight Through Precipitation						
	Weather Conditions				Additional Risk Criteria			
	Weather:	None	Clouds				Upper-Level Wind Shear:	Low
			Type	Coverage	Base (ft)	Tops (ft)		
	Visibility:	7 miles	Cumulus	Few	3,000	10,000	Ascent Corridor Recovery:	Mod-High
Temp/Humidity:	74°F / 77%					Booster Recovery Weather:	Moderate	
Liftoff Winds (200'):	190° 20 - 25 mph					Solar Activity:	Low	
48-Hour Delay		Probability of Violating Weather Constraints						
48-Hour Delay	40%	Primary Concerns: Liftoff Winds, Flight Through Precipitation						
	Weather Conditions				Additional Risk Criteria			
	Weather:	Isolated Showers	Clouds				Upper-Level Wind Shear:	Low
			Type	Coverage	Base (ft)	Tops (ft)		
	Visibility:	7 miles	Cumulus	Scattered	3,000	12,000	Ascent Corridor Recovery:	High
Temp/Humidity:	75°F / 75%					Booster Recovery Weather:	High	
Liftoff Winds (200'):	240° 20 - 25 mph					Solar Activity:	Low	
Notes	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