



Launch Mission Execution Forecast

Mission: Falcon 9 Arabsat BADR-8

Issued: 25 May 2023 / 1600L (2000Z)

Valid: 26 May 2023 / 2325-27/0122L (27/0325-0522Z)



Forecast Discussion: The complex and active weather pattern will remain in place for the next several days as a broad area of low pressure centered over south Florida, aided by an upper-level trough, continues to develop and slowly push northwards along the Atlantic coast. By tomorrow, the center of low pressure will be just off the coast to the east of the Spaceport. The low's position will bring breezy northerly winds, along with rounds of coastal showers. As a result, the main concerns will be the Cumulus Cloud Rule and the Surface Electric Fields Rule associated with these showers.

The latest model guidance shows us finally breaking out of the wet pattern by Saturday, as the low continues to push northwards, and drier air filters in behind it. Conditions look significantly more favorable, with the only concern being the Cumulus Cloud Rule.

		Probability of Violating Weather Constraints ¹			
Launch Day	70%	Primary Concerns: Cumulus Cloud Rule, Surface Electric Fields Rule, Liftoff Winds			
	Weather Conditions			Additional Risk Criteria ²	
	Weather/Visibility: Sct Showers / 7 mi.	Clouds			Upper-Level Wind Shear: Low
	Temp/Humidity: 73°F / 85%	Type	Coverage	Base (ft)	Tops (ft)
Liftoff Winds (200'): 350° 18 - 23 mph	Cumulus	Broken	3,000	18,000	Booster Recovery Weather: Low
					Solar Activity: Low
		Probability of Violating Weather Constraints			
24-Hour Delay	15%	Primary Concerns: Cumulus Cloud Rule			
	Weather Conditions			Additional Risk Criteria	
	Weather/Visibility: None / 7 mi.	Clouds			Upper-Level Wind Shear: Low
	Temp/Humidity: 72°F / 80%	Type	Coverage	Base (ft)	Tops (ft)
Liftoff Winds (200'): 010° 10 - 15 mph	Cumulus	Scattered	3,000	8,000	Booster Recovery Weather: Low
					Solar Activity: Low
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 Required			