



Launch Mission Execution Forecast

Mission: Falcon 9 GPS III-3

Issued: 29 Jun 2020 / 0830L (1230Z)

Valid: 30 Jun 2020 / 1556 – 1610L (1956 – 2010Z)



Forecast Discussion: No significant changes to the weather pattern over the Spaceport today, as the subtropical ridge remains the dominant feature over the area. This will limit the amount of afternoon and evening convection, especially along the Space Coast. Central Florida may still see some isolated, slow-moving storms that will have gusty winds. Tomorrow, the regime will begin to change as a low-pressure area moves off the Eastern Seaboard, nudging the subtropical ridge south of the Spaceport. This creates stronger low-level southwesterly flow and hinders the inland progression of the sea breeze, keeping storms closer to the Space Coast. This more unfavorable pattern will continue with more storm coverage each day until the low-pressure area moves away to the northeast. The primary weather concerns for both days are the Cumulus and Anvil Cloud Rules, as well as the Surface Electric Field Rule associated with afternoon convection expected west of the Spaceport, mostly towards the end and after the window.

		Probability of Violating Weather Constraints				
Launch Day	40%	Primary Concerns: Cumulus Cloud Rule, Anvil Cloud Rule, Surface Electric Field Rule				
	Weather Conditions			Additional Risk Criteria		
	Weather/Visibility: Isold T-Storms / 7 mi.			Clouds		Upper-Level Wind Shear: Low
		Type	Coverage	Base (ft)	Tops (ft)	
	Temp/Humidity: 86°F / 70%	Cumulus	Scattered	3,000	12,000	Booster Recovery Weather: Low
Liftoff Winds (200'): 150° 12 - 17 mph	Cirrostratus	Scattered	25,000	28,000	Solar Activity: Low	
		Probability of Violating Weather Constraints				
24-Hour Delay	60%	Primary Concerns: Cumulus Cloud Rule, Anvil Cloud Rule, Surface Electric Field Rule				
	Weather Conditions			Additional Risk Criteria		
	Weather/Visibility: Isold T-Storms / 7 mi.			Clouds		Upper-Level Wind Shear: Low
		Type	Coverage	Base (ft)	Tops (ft)	
	Temp/Humidity: 86°F / 70%	Cumulus	Scattered	3,000	12,000	Booster Recovery Weather: Low
Liftoff Winds (200'): 150° 12 - 17 mph	Cirrostratus	Broken	25,000	28,000	Solar Activity: Low	
Note: The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear, booster recovery weather, and solar activity.						
Next Forecast Will Be Issued		As Required				