



Launch Mission Execution Forecast

Mission: Falcon 9 Starlink-L27

Issued: 6 May 2021 / 0800L (1230Z)

Valid: 9 May 2021 / 0142 – 0334L (0542 – 0734Z)



Forecast Discussion: Surface cold front that is moving across the Space Coast this morning will continue southward across Florida through the day on Friday. Behind the boundary, high pressure will work its way across all of Florida bringing slightly cooler temperatures and onshore winds. Skies are expected to clear with perhaps only a few stray cumulus clouds across the area...and most of those will likely remain out over the coastal waters. The primary weather concern for launch day is the Cumulus Clouds Rule.

In the event of delay, the weather doesn't change very much across the Space Coast region. High pressure remains in control across the area but the surface pressure gradient tightens slightly producing a bit stronger winds. Clouds are not expected to be very widespread over the area but there will be a slight increase from Sunday morning. Winds are expected to increase over the Space Coast region as well as the recovery area. The primary concerns are the Cumulus Clouds Rule and Liftoff Winds.

		Probability of Violating Weather Constraints				
Launch Day	20%	Primary Concerns: Cumulus Clouds Rule				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility: None / 7 mi.	Clouds			Upper-Level Wind Shear: LOW	
	Temp/Humidity: 66°F / 84%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: LOW
Liftoff Winds (200'): 120° 10 - 15 mph	Cumulus	Few	2,500	4,000	Solar Activity: LOW	
		Probability of Violating Weather Constraints				
24-Hour Delay	30%	Primary Concerns: Cumulus Clouds Rule, Liftoff Winds				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility: None / 7 mi.	Clouds			Upper-Level Wind Shear: LOW	
	Temp/Humidity: 72°F / 86%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: MOD
Liftoff Winds (200'): 160° 15 - 20 mph	Cumulus	Scattered	2,500	4,000	Solar Activity: LOW	
<i>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.</i>						
Next Forecast Will Be Issued		7 MAY 2021				