



Launch Mission Execution Forecast

Mission: Falcon 9 Starlink L-19

Issued: 14 Feb 2021 / 2300L (15/0400Z)

Valid: 15 Feb 2021 / 2249 – 2310L (16 Feb 0349 – 0410Z)



Forecast Discussion: A low pressure area is developing in the Gulf of Mexico. This low will pull the frontal boundary that's been creating all the unsettled weather north of the Spaceport. The area will still be unseasonably warm, so isolated afternoon showers and thunderstorms are possible. The primary weather concern for a launch attempt Monday evening is the Cumulus Cloud Rule associated with any lingering convection.

On Tuesday, the low pressure system quickly slides northeast through New England and into the North Atlantic. The associated cold front will weaken significantly, pass through Central Florida and stall south of the Spaceport prior to the launch window Tuesday Night. Weather conditions will be favorable for a launch attempt Tuesday night with light northwesterly winds and a low cloud deck. Only a small concern exists for the Cumulus Cloud Rule in the event the front stalls closer to the Spaceport.

		Probability of Violating Weather Constraints					
Launch Day	40%	Primary Concerns: Cumulus Cloud Rule					
	Weather Conditions				Additional Risk Criteria		
	Weather/Visibility: Iso Showers / 7 mi.	Clouds				Upper-Level Wind Shear: Low	
	Temp/Humidity: 70°F / 90%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Moderate	
Liftoff Winds (200'): 210° 7 - 12 mph	Cumulus	Scattered	3,000	12,000	Solar Activity: Low		
	Altostratus	Scattered	12,000	15,000			
		Probability of Violating Weather Constraints					
24-Hour Delay	20%	Primary Concerns: Cumulus Cloud Rule					
	Weather Conditions				Additional Risk Criteria		
	Weather/Visibility: None / 7 mi.	Clouds				Upper-Level Wind Shear: Low	
	Temp/Humidity: 64°F / 80%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Moderate	
Liftoff Winds (200'): 340° 10 - 15 mph	Cumulus	Scattered	2,000	8,000	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					