



Launch Mission Execution Forecast

Mission: Falcon 9 StarlinkV1.0-L17

Issued: 2 Mar 2021 / 0945L (1445Z)

Valid: 2 Mar 2021 / 1853 - 2054L (2/2353 – 3/0154Z)



Forecast Discussion: A weak cool front is currently draped across Central Florida this morning, generating a few light showers that are moving from west to east across the peninsula. This boundary is expected to wave across the state today as an area of low pressure develops along the front over the northern Gulf of Mexico. The boundary lifts back north as a warm front this afternoon and evening, bringing the threat for showers and a storm or two across interior Central Florida that will push towards the Spaceport during the launch window. The primary concern for this evening's launch attempt will be cumulus clouds and the surface electric field rule both associated with showers.

Surface low is forecast to track across North Florida and into the Atlantic overnight, cranking the boundary back through the state early Wednesday afternoon. Despite some timing differences with this feature, models agree with the front being well south of the Spaceport by Wednesday evening. Cool and breezy north-northwest winds will be bringing in drier air with post-frontal stratocumulus and lingering high clouds in place. The primary weather concerns for Wednesday evening launch attempts will be a small threat for cumulus cloud violations.

Launch Day	Probability of Violating Weather Constraints					
	60%	Primary Concerns: Cumulus Cloud Rule, Surface Electric Field Rule				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility: Sct. Showers / 7 mi.	Clouds			Upper-Level Wind Shear: Low	
	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Moderate	
Temp/Humidity: 71°F / 84%	Cumulus	Broken	3,000	12,000	Solar Activity: Low	
Liftoff Winds (200'): VRB 5 mph	Cirrocumulus	Broken	20,000	30,000		

24-Hour Delay	Probability of Violating Weather Constraints					
	10%	Primary Concerns: Cumulus Cloud Rule				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility: None / 7 mi.	Clouds			Upper-Level Wind Shear: Low	
	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Moderate	
Temp/Humidity: 61°F / 80%	Stratocumulus	Broken	2,500	5,000	Solar Activity: Low	
Liftoff Winds (200'): 350° 12 - 17 mph	Cirrus	Broken	25,000	30,000		

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 Needed