



Launch Mission Execution Forecast

Mission: Falcon 9 StarlinkV1.0-L17

Issued: 26 Feb 2021 / 0800L (1300Z)

Valid: 28 Feb 2021 / 2027 - 2048L (1/0127- 0148Z)



Forecast Discussion: The axis of high pressure over the western Atlantic will remain across the Florida peninsula into Saturday, keeping the broad frontal zone across the Mid-South north of Florida. The Spaceport will see continued warm and generally dry weather through Saturday, with a steady increase in the prevailing onshore flow.

The ridge axis will move just south of the area by Sunday, shifting prevailing flow out of the south-southwest and holding the Atlantic sea breeze closer to the east coast. This will set up the afternoon sea breeze collision near the coastal counties. While models have trended towards a much drier environment, still expect an increase in cumulus clouds with a few drifting back towards the Spaceport after sunset. The primary weather concerns for the Sunday evening launch attempt will be these cumulus clouds along with liftoff winds in the increased southeasterly flow.

Models are in better agreement this morning as to the timing of the next frontal boundary, now having it reach Central Florida, though very weak, Monday evening. This will bring a small increase in local rain chances, along with increasing cloud cover. The primary weather concerns for a backup launch attempt Monday evening will be thick clouds and cumulus clouds.

		Probability of Violating Weather Constraints					
Launch Day	20%	Primary Concerns: Cumulus Cloud Rule, Liftoff Winds					
	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: 73°F / 79%	Cumulus	Scattered	3,000	9,000	Solar Activity: Low		
Liftoff Winds (200'): 160° 17 - 22 mph	Cirrus	Scattered	30,000	35,000			
		Probability of Violating Weather Constraints					
24-Hour Delay	30%	Primary Concerns: Thick Cloud Layer Rule, Thick Cloud Layer 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: 74°F / 80%	Cumulus	Scattered	2,500	10,000	Solar Activity: Low		
Liftoff Winds (200'): 210° 7- 12 mph	Cirrocumulus	Broken	30,000	40,000			
<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		27 Feb 2021					