



Launch Mission Execution Forecast

Mission: SpaceX Falcon 9 Starlink-L9

Issued: 23 Jun 2020 / 0945L (1345Z)

Valid: 25 Jun 2020 / 1634 – 1645L (2034 – 2045Z)



Forecast Discussion: The Atlantic ridge axis will be located just south of the Spaceport for the next several days, slowly beginning to creep northwards with weakening southwest flow headed into Thursday. This pattern will favor afternoon showers and thunderstorms with daytime heating and the prevailing offshore flow. The east coast sea breeze will remain closer to the coast, and the west coast sea breeze will move across the peninsula. Mid to upper level westerly steering flow will also help push showers and storms, along with their associated anvils, back towards the east coast. Therefore, the main concerns for the primary launch window will be the Cumulus Cloud Rule, Anvil Cloud Rule, and Lightning Rule.

On Friday, the Atlantic ridge axis will continue to push northwards, setting up right over the region. Weakening low-level flow will allow the east coast sea breeze to push farther west. Because of this, the shower and storm activity will likely be focused further inland by the late afternoon. For the backup launch window, conditions continue to look marginally more favorable, with the same primary concerns as on Thursday.

Launch Day	Probability of Violating Weather Constraints							
	60%	Primary Concerns: Cumulus Cloud Rule, Anvil Cloud Rule, Lightning Rule						
	Weather Conditions						Additional Risk Criteria	
	Weather/Visibility:	Sct T-Storms / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low
	Temp/Humidity:	83°F / 75%	Cumulus	Scattered	3,000	15,000	Booster Recovery Weather:	Low
Liftoff Winds (200'):	150° 10 - 15 mph	Cirrostratus	Broken	25,000	28,000	Solar Activity:	Low	
24-Hour Delay	Probability of Violating Weather Constraints							
	40%	Primary Concerns: Cumulus Cloud Rule, Anvil Cloud Rule, Lightning Rule						
	Weather Conditions						Additional Risk Criteria	
	Weather/Visibility:	Iso T-Storms / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low
	Temp/Humidity:	84°F / 75%	Cumulus	Scattered	3,000	10,000	Booster Recovery Weather:	Low
Liftoff Winds (200'):	150° 7 - 12 mph	Cirrostratus	Scattered	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		24 Jun 2020						