



Launch Mission Execution Forecast

Mission: Falcon 9 Starlink 10-2

Issued: 13 June 2024 / 2100L (14/0100Z)

Valid: 14 June 2024 / 1623 – 2023L (2023 – 15/0023Z)



Forecast Discussion: The tropical disturbance off the Florida coast, 90L, will continue to lift away from the state over the next 24 hours, dragging its associated boundary from North Florida into Central Florida. Though drier air is wrapping around this feature and filtering down the state behind the boundary, overall moisture will remain above normal, just lower than earlier in the week. The remainder of the ongoing storms along the west coast of Florida will continue to wane with sunset, with generally quiet conditions through the overnight and first part of Friday.

Daytime heating and the presence of the boundary will once again kick off numerous showers and storms by mid Friday afternoon with the exact location of activity dependent on how much north-northeasterly flow we see behind the boundary. Models continue to show the tendency for any activity to be inland of the Spaceport, especially heading further into the launch window. Anvil level flow will still be out of the west-northwest, though less robust than this evening, meaning that even with activity to the southwest anvil may still reach the Spaceport and these will remain the primary concern.

The drier airmass will continue to wrap into the region behind the departing low into Saturday. Models diverge on how quickly and with how much vigor this occurs, and it's hard to bet against at least a few afternoon showers or storms to be around for the opening of the window Saturday afternoon given the time of year. However, with deep east-northeast flow any activity that is present should quickly transition well inland with minimal concerns for the back half of the window.

Launch Day		Probability of Violating Weather Constraints ¹					
70% → 30%		Primary Concerns: Anvil Cloud Rules, Cumulus Cloud Rule					
Weather Conditions				Additional Risk Criteria ²			
Weather/Visibility:	Sct. Storms / 7 mi.	Clouds			Upper-Level Wind Shear:	Low	
		Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather:	Low
Temp/Humidity:	84°F / 80%	Cumulus	Scattered	3,500	15,000	Solar Activity:	Low
Liftoff Winds (200'):	060° 10 - 15 mph	Cirrostratus	Overcast	28,000	35,000		
24-Hour Delay		Probability of Violating Weather Constraints					
60% → 20%		Primary Concerns: Anvil Cloud Rules, 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:	Low
Temp/Humidity:	84°F / 80%	Cumulus	Scattered	3,500	15,000	Solar Activity:	Low
Liftoff Winds (200'):	090° 10 - 15 mph	Cirrostratus	Overcast	28,000	35,000		
Notes	1. The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring any random time during the launch window.						
	2. Additional Risk Criteria, which are not included in the PoV, are mission-specific constraints that may not include all phenomena within each risk factor.						
See https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf for more information							
Next Forecast Will Be Issued		As Needed					