



# Launch Mission Execution Forecast

**Mission:** Falcon 9 Starlink 4-35

**Issued:** 23 Sep 2022 / 0800L (1200Z)

**Valid:** 24 Sep 2022 / 1927 – 2145L (2327 – 25/0145Z)



**Forecast Discussion:** As Hurricane Fiona races northwards, a trailing band of convergence has developed from it and in front of a high pressure system moving into the eastern US. This frontal band will push through the Space Coast today, producing some isolated showers and bringing gusty northeasterly winds. The band should stay south of the Spaceport Saturday as high pressure builds in, allowing winds to diminish. The primary weather concerns for a Saturday evening launch attempt are the Cumulus Cloud Rule and Liftoff Winds associated with the frontal band.

On Sunday, the frontal band will push back northwards, bringing the showers activity closer to the Spaceport. Although the winds will be weaker, this will keep Cumulus Cloud Rule as a concern with the addition of the Disturbed Weather Rule in the event the band makes it completely over the Spaceport.

		Probability of Violating Weather Constraints <sup>1</sup>				
<b>Launch Day</b>	<b>20%</b>	Primary Concerns: Cumulus Cloud Rule, Liftoff Winds				
	Weather Conditions			Additional Risk Criteria <sup>2</sup>		
	<b>Weather/Visibility:</b> Isold Showers / 7 mi.	<b>Clouds</b>			<b>Upper-Level Wind Shear:</b> Low	
	<b>Temp/Humidity:</b> 78°F / 82%	Type	Coverage	Base (ft)	Tops (ft)	<b>Booster Recovery Weather:</b> Low
<b>Liftoff Winds (200'):</b> 060° 17 - 22 mph	Cumulus	Few	3,000	10,000	<b>Solar Activity:</b> Low	
	Altocumulus	Scattered	14,000	16,000		
		Probability of Violating Weather Constraints				
<b>24-Hour Delay</b>	<b>30%</b>	Primary Concerns: Cumulus Cloud Rule, Disturbed Weather Rule				
	Weather Conditions			Additional Risk Criteria		
	<b>Weather/Visibility:</b> Isold Showers / 7 mi.	<b>Clouds</b>			<b>Upper-Level Wind Shear:</b> Low	
	<b>Temp/Humidity:</b> 77°F / 82%	Type	Coverage	Base (ft)	Tops (ft)	<b>Booster Recovery Weather:</b> Low
<b>Liftoff Winds (200'):</b> 080° 10 - 15 mph	Cumulus	Scattered	3,000	12,000	<b>Solar Activity:</b> Low	
	Altocumulus	Scattered	12,000	15,000		
<b>Notes</b>	1. The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring anytime 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 <a href="https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf">https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf</a> for more information				
<b>Next Forecast Will Be Issued</b>		As Required				