

## **Launch Mission Execution Forecast**

Mission: Falcon 9 Starlink 12-20

**Issued**: 1 Mar 2025 / 1145L (1645Z)

**Valid**: 2 Mar 2025 / 2029 - 3/0029L (3/0129 – 0529Z)



Forecast Discussion: Another weak cold front will slide down the Florida peninsula late tonight before a large area of high pressure moves in behind it along the eastern seaboard. A secondary weak boundary arrives with a north-northeasterly wind surge late Sunday afternoon into Sunday evening. The timing and strength of this surge still varies by a couple of hours between models, with the consensus still pointing to the highest winds occurring before the primary window opening late Sunday evening. The threat of gusty winds will remain elevated into the window, posing a Liftoff Wind concern. This boundary looks relatively shallow as it moves across, with the threat of Atlantic showers tall enough to pose a Cumulus Cloud Rule concern still low. However, there has been an increase in the forecast cloud cover with this boundary, so a more robust shower or taller cumulus cloud moving into the coast still cannot be completely ruled out.

High pressure over the east coast is expected to move into the western Atlantic heading into Monday, veering Spaceport winds around from the east. There will be enough low-level moisture for onshore moving cumulus and the occasional shower, but the threat of significant activity and any violations looks low.

OCC									
	Probability of Violating Weather Constraints <sup>1</sup>								
aunch Day	10% Primary Concerns: Liftoff Winds, Cumulus Cloud Rule								
	Weather Conditions							Additional Risk Criteria <sup>2</sup>	
	Weather/Visil	bility:	None / 7 mi.	Туре	Clouds Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low
_	Temp/Humidi	ity:	64°F / 70%	Cumulus	Scattered	2,500	6,000	Booster Recovery Weather:	Low
	Liftoff Winds	(200'):	010° 20 - 25 mph	Cirrus	Scattered	30,000	35,000	Solar Activity:	Low
	Probability of Violating Weather Constraints								
			Pro	bability of \	/iolating W	eather	Constra	ints	
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ur Delay	10%	Prima	ary Concerns: Cu		Rule	eather	Constra	Additional Risk Cr	iteria
	10% Weather/Visil		ary Concerns: Cu	mulus Cloud F	Rule		Tops (ft)	1	i <b>teria</b>
24-Hour Delay		bility:	ary Concerns: Cu Weath	mulus Cloud F	Rule ns Clouds			Additional Risk Cr	Low
	Weather/Visil	bility:	weath	mulus Cloud Fer Condition	Rule  Clouds  Coverage	Base (ft)	Tops (ft)	Additional Risk Cr	Low
24-Hour	Weather/Visil Temp/Humidi Liftoff Winds  1. The Proba	bility: ity: (200'): bility of V	Weath None / 7 mi. 65°F / 70% 070° 12 - 17 mph	Type Cumulus Cirrus	Rule  Clouds Coverage Scattered Broken	Base (ft) 3,500 30,000 onstraint vio	Tops (ft) 8,000 35,000	Additional Risk Cr Upper-Level Wind Shear: Booster Recovery Weather:	Low Low Low
	Weather/Visil Temp/Humidi Liftoff Winds  1. The Proba	bility: ity: (200'): bility of V Risk Crite	Weath None / 7 mi. 65°F / 70% 070° 12 - 17 mph Violation (PoV) is the chaeria, which are not include	Type Cumulus Cirrus  cree of a local safed in the PoV, are	Clouds Coverage Scattered Broken  ety or customer coe mission-specific	Base (ft) 3,500 30,000 onstraint vice constraints	Tops (ft) 8,000 35,000 slation occurr to that may no	Additional Risk Cri Upper-Level Wind Shear: Booster Recovery Weather: Solar Activity:	Low Low Low