

## **Launch Mission Execution Forecast**

Mission: Falcon 9 Starlink 4-18

**Issued**: 17 May 2022 / 0800L (1200Z)

**Valid**: 18 May 2022 / 0610 – 0710L (1010 – 1110Z)



**Forecast Discussion**: Southerly winds will keep temperatures elevated in Central Florida and allow daily sea breeze interactions to produce isolated showers and thunderstorms. The tail end of a weakening frontal boundary has stalled northeast of the Space Coast so should have little impact on Spaceport weather. The primary launch weather concerns for a Wednesday morning attempt are the Cumulus and Anvil Cloud Rules associated with any lingering convection.

High pressure will begin to build back into Central Florida on Thursday, continuing to the daily cycle of sea breeze interactions. The primary weather concern for Thursday morning is the Cumulus Cloud Rule.

	Probability of Violating Weather Constraints <sup>1</sup>								
Day	20% Primary Concerns: Cumulus Cloud Rule, Anvil Cloud Rule								
ch	Weather Conditions							Additional Risk Criteria <sup>2</sup>	
aunch	Weather/Visi	bility:	None / 7 mi.	Type	Cloud: Coverage	S Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low
ت	Temp/Humid	ity:	72°F / 90%	Cumulus	Few	3,000	10,000	Booster Recovery Weather:	Low
	Liftoff Winds	(200'):	240° 8 - 12 mph					Solar Activity:	Low
	Probability of Violating Weather Constraints								
Delay	10% Primary Concerns: Cumulus Cloud Rule								
	Weather Conditions							Additional Risk Criteria	
0			Weather	Condition	ıs			Additional Risk Cr	iteria
Ť	Weather/Visi	oility:	Weather None / 7 mi.	Type	Cloud:	S Base (ft)	Tops (ft)	Additional Risk Cr Upper-Level Wind Shear:	Low
24-Hour	Weather/Visi Temp/Humid	•			Cloud	_	Tops (ft) 8,000		
24-H	Temp/Humid	ity:	None / 7 mi.	Туре	Cloud: Coverage	Base (ft)	,	Upper-Level Wind Shear:	Low
	Temp/Humid Liftoff Winds  1. The Proba	ity: (200'): bility of V	None / 7 mi. 72°F / 90% 220° 8 - 12 mph  //iolation (PoV) is the chance	Type Cumulus ee of a local safet	Cloud: Coverage Few	Base (ft) 3,000  constraint vio	8,000	Upper-Level Wind Shear: Booster Recovery Weather:	Low Low Low
Notes 24-H	Temp/Humid Liftoff Winds  1. The Proba	ity: (200'): bility of V Risk Crite	None / 7 mi.  72°F / 90%  220° 8 - 12 mph  Violation (PoV) is the chance of the chance	Type Cumulus  ee of a local safet d in the PoV, are	Cloud: Coverage Few  ty or customer of mission-specific	Base (ft) 3,000  constraint vicic constraints	8,000 Dation occurn s that may no	Upper-Level Wind Shear: Booster Recovery Weather: Solar Activity:  ng anytime during the launch windo	Low Low Low