

## **Launch Mission Execution Forecast**

Mission: Falcon 9 Starlink 6-2 Issued: 18 Apr 2023 / 0845L (1245Z)

Valid:

19 Apr 2023 / 0843E (12432) 19 Apr 2023 / 0818 – 1200L (1218 – 1600Z)



**Forecast Discussion**: High pressure centered across the northern gulf coast will shift northeast into the Deep South, reaching the western Atlantic on Wednesday. While the weather will remain pleasant overall, mid-level vorticity in the Gulf of Mexico will create a weak shortwave trough south of the ridge. This will bring increased mid and upper-level cloud cover through the Florida Peninsula Wednesday, along with breezy winds out of the northeast. As a result, the main concerns for the primary launch window will be for Liftoff Winds and the Thick Cloud Layers Rule.

On Thursday, high pressure continues drifting northeast, but elongates across the western Atlantic as mid-level vorticity persists across the peninsula. The Space Coast will remain on the southern flank of the ridge. The tightening pressure gradient will likely increase winds out of the east as mid and upper-level cloud lingers across the state. The main concern for the backup launch window will again be for Liftoff Winds and the Thick Cloud Layers Rule.

	Probability of Violating Weather Constraints <sup>1</sup>										
Day	15%	Primary Concerns: Liftoff Winds, Thick Cloud Layers Rule									
Launch	Weather Conditions								Additional Risk Criteria <sup>2</sup>		
	Weather/Visibility:		None /7 mi.		Clouds Type Coverage Base (ft) Tops (f			Tops (ft)	Upper-Level Wind Shear:	Low	
	Temp/Humid	ity:	70°F / 70%	, D	Cumulus	Few	2,500	3,500	Booster Recovery Weather:	Low	
	Liftoff Winds	<b>(200')</b> :	070° 15 - 2	20 mph	Altostratus	Scattered	20,000	24,000	Solar Activity:	Low	
	Probability of Violating Weather Constraints										
Delay	25%	25% Primary Concerns: Liftoff Winds, Thick Cloud Layers Rule									
	Weather Conditions								Additional Risk Criteria		
24-Hour	Weather/Visibility: None / 7 mi.			ni.	Туре	Clouds Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low-Mod	
24	Temp/Humidity: 71°F / 80%			, D	Cumulus	Scattered	2,500	3,500	Booster Recovery Weather:	Low	
	Liftoff Winds (200'): 090° 17 - 22 mph			22 mph	Altostratus	Scattered	20,000	23,000	Solar Activity:	Low	
Notes											
Next	Next Forecast Will Be Issued As Required										