

Launch Mission Execution Forecast

 Mission:
 Falcon 9 Starlink 5-3

 Issued:
 1 Feb 2023 / 0830L (1330Z)

Valid:

2 Feb 2023 / 0237 – 0620L (0737 – 1120Z)



Forecast Discussion: Old frontal boundary to the north of the Spaceport has washed out this morning, with the next front currently wandering through the southeastern US. There remains some low-level moisture pooled along this feature that will drift south into the area, leading to additional cloud development into this afternoon. Most of the diurnal cloud cover will dissipate or move offshore late this evening, though a light Atlantic shower in the vicinity offshore cannot be ruled out heading into the primary launch opportunities early Thursday morning. However, any clouds or activity are not expected to be a significant launch weather concern. Light winds will allow fog and stratus development, especially towards the end of the window.

A weak area of low pressure will move across the northern Gulf coast late Thursday, bringing the next front into Florida on Friday. There is better model agreement in keeping the Spaceport dry ahead of this front arriving late morning, keeping the backup launch window early Friday morning dry. Scattered cumulus clouds advecting across the area should not present a launch weather concern, but any faster movement of the front may bring an increased threat for clouds, especially for the end of the window towards daybreak.

	Probability of Violating Weather Constraints ¹									
Launch Day	<10%	Prima	ary Conce	erns: Cum						
	Weather Conditions								Additional Risk Criteria ²	
	Weather/Visibility:		Fog / 5 mi.		Clouds Type Coverage Base (Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low
	Temp/Humid	ity:	69°F / 95%	, D	Stratus	Scattered	500	1,500	Booster Recovery Weather:	Low
	Liftoff Winds	(200') :	VRB 5 mp	h	Cumulus	Scattered	3,000	5,000	Solar Activity:	Low
	Probability of Violating Weather Constraints									
Delay	10% Primary Concerns: Cumulus Cloud Rule									
	Weather Conditions								Additional Risk Criteria	
24-Hour	Weather/Visibility: None / 7 n		ni.	Туре	Clouds Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low	
24	Temp/Humidity:		67°F / 90%		Cumulus	Scattered	3,000	8,000	Booster Recovery Weather:	Low
	Liftoff Winds (200'): 230° 12 - 1			7 mph					Solar Activity:	Low
Notes	 The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring any random time during the launch windo Additional Risk Criteria, which are not included in the PoV, are mission-specific constraints that may not include all phenomena within each risk factor 									
Z	See <u>https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.</u>								<u>pdf</u> for more information	
Next Forecast Will Be Issued As Needed										