



Launch Mission Execution Forecast



Mission: Falcon 9 Transporter-6

Issued: 02 Jan 2023 / 0900L (1400Z)

Valid: 03 Jan 2023 / 0956 – 0957L (1456 – 1457Z)

Forecast Discussion: After this weekend’s boundary passage, high pressure is in place before another frontal system is anticipated to reach the Spaceport late Wednesday into early Thursday. Ahead of the front, a stronger pressure gradient will raise wind speeds, and as the high center moves off farther into the Atlantic winds will shift to become southeasterly. Weather concerns for the primary launch attempt tomorrow morning are the Cumulus Cloud Rule due to a minor chance for fast, onshore-moving Atlantic showers as well as Liftoff Winds.

Should the launch push to the backup opportunity, the front will be located along the panhandle of Florida and expected to affect Central Florida by Wednesday evening. With an even stronger pressure gradient, wind speeds will increase further, and wind direction will shift to become southwesterly. Concerns for violating the Cumulus Cloud Rule drop off on Wednesday, and Liftoff Winds are expected to be the primary threat for launch.

Launch Day		Probability of Violating Weather Constraints ¹					
		10%	Primary Concerns: Cumulus Cloud Rule, Liftoff Winds				
		Weather Conditions				Additional Risk Criteria ²	
		Weather/Visibility: None / 7 mi.	Clouds				Upper-Level Wind Shear: Low
			Type	Coverage	Base (ft)	Tops (ft)	
		Temp/Humidity: 71°F / 78%	Cumulus	Few	2,500	6,000	Solar Activity: Low
		Liftoff Winds (200'): 150° 17 - 22 mph					
24-Hour Delay		Probability of Violating Weather Constraints					
		20%	Primary Concerns: Liftoff Winds				
		Weather Conditions				Additional Risk Criteria	
		Weather/Visibility: None / 7 mi.	Clouds				Upper-Level Wind Shear: Low-Mod
			Type	Coverage	Base (ft)	Tops (ft)	
		Temp/Humidity: 70°F / 91%	Cumulus	Few	2,000	4,500	Solar Activity: Low
		Liftoff Winds (200'): 200° 25 - 30 mph	Cirrus	Scattered	29,000	32,000	
Notes	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 https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf for more information						
Next Forecast Will Be Issued		AS REQUIRED					