



Launch Mission Execution Forecast



Mission: Falcon 9 Transporter-6

Issued: 30 Dec 2022 / 0730L (1230Z)

Valid: 02 Jan 2023 / 0956 – 0957L (1456 – 1457Z)

Forecast Discussion: Over the weekend a weak boundary will pass through the area, bringing showers and a chance for a few storms late Saturday into early Sunday. Behind the boundary, high pressure will build in throughout Sunday and usher in favorable launch conditions for a Monday morning attempt. With the high center located offshore just to the north and east, winds will be light and from the east. The weather concern for the primary launch opportunity is the Cumulus Cloud Rule, although the expected low-topped cumulus clouds are unlikely to pose any significant risk of violating launch constraints.

Another frontal system is anticipated to affect the Spaceport and surrounding areas in the middle of next week. Ahead of the front, a stronger pressure gradient will raise wind speeds. As the high center moves off farther into the Atlantic, winds will also shift to become southeasterly. Weather concerns for the backup launch attempt are the Cumulus Cloud Rule due to a chance for fast, onshore-moving Atlantic showers as well as Liftoff Winds.

Launch Day		Probability of Violating Weather Constraints ¹				
Launch Day	10%	Primary Concerns: Cumulus Cloud Rule				
	Weather Conditions			Additional Risk Criteria ²		
	Weather/Visibility: None / 7 mi.	Clouds			Upper-Level Wind Shear: Low	
	Temp/Humidity: 67°F / 87%	Type	Coverage	Base (ft)	Tops (ft)	Solar Activity: Low
Liftoff Winds (200'): 080° 05 - 10 mph	Cumulus	Few	2,500	5,000		
24-Hour Delay		Probability of Violating Weather Constraints				
24-Hour Delay	20%	Primary Concerns: Cumulus Cloud Rule, Liftoff Winds				
	Weather Conditions			Additional Risk Criteria		
	Weather/Visibility: None / 7 mi.	Clouds			Upper-Level Wind Shear: Low	
	Temp/Humidity: 69°F / 90%	Type	Coverage	Base (ft)	Tops (ft)	Solar Activity: Low
Liftoff Winds (200'): 150° 17 - 22 mph	Cumulus	Scattered	2,000	7,000		
Notes	<ol style="list-style-type: none"> The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring anytime during the launch window. 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		31 DEC 2022				