



Launch Mission Execution Forecast

Mission: Falcon 9 Transporter-3

Issued: 11 Jan 2022 / 0800L (1300Z)

Valid: 13 Jan 2022 / 1025 – 1054L (1525 – 1554Z)



Forecast Discussion: A strong area of high pressure is spilling across the eastern US behind yesterday's front, bringing cool and breezy conditions to the Spaceport. A few Atlantic showers will be possible as winds turn onshore, with similar conditions continuing into Wednesday.

Forecast trends are less excited about developing any organized system over the state as a fast moving upper level system crosses Wednesday night. Instead, expect increased cloud cover along with a few more showers. The bulk of any precipitation and cloud cover still looks to transit east of the Spaceport by the primary launch opportunity Thursday morning though the mid-level clouds may be harder to scour out. The primary concern for a Thursday morning launch attempt will be for Thick Clouds and Cumulus Clouds.

An area of low pressure will develop along the eastern seaboard late Thursday into Friday, with northwesterly flow reinforcing the dry and chilly air mass. Only a few Cumulus Clouds are expected as a weather concern for the backup launch opportunity Friday morning.

		Probability of Violating Weather Constraints				
Launch Day	30%	Primary Concerns: Cumulus Cloud Rule, Thick Cloud Layer Rule				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility: None / 7 mi.	Clouds			Upper-Level Wind Shear: Low	
	Temp/Humidity: 60°F / 77%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low
Liftoff Winds (200'): 320° 12 - 17 mph	Cumulus	Scattered	4,000	10,000	Solar Activity: Low	
	Altostratus	Scattered	15,000	19,000		
		Probability of Violating Weather Constraints				
24-Hour Delay	10%	Primary Concerns: Cumulus Cloud Rule				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility: None / 7 mi.	Clouds			Upper-Level Wind Shear: Low	
	Temp/Humidity: 55°F / 59%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low
Liftoff Winds (200'): 320° 12 - 17 mph	Cumulus	Few	3,500	5,000	Solar Activity: Low	
<p><i>Note: The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear, booster recovery weather, and solar activity.</i></p>						
Next Forecast Will Be Issued		12 Jan 2021				