



Launch Mission Execution Forecast

Mission: Falcon 9 Transporter-1

Issued: 23 Jan 2021 / 1030L (1530Z)

Valid: 24 Jan 2021 / 1000-1022L (1500-1522Z)



Forecast Discussion: A frontal boundary is over Central Florida creating significant cloud cover and isolated rain showers. On Sunday, the front will continue to erode over the Spaceport as high pressure builds in from the north. This will decrease the cloudiness and shower coverage through the day. The primary weather concerns Sunday are Cumulus Cloud Rule and the Thick Cloud Layer Rule associated with the lingering frontal effects.

On Monday, the high pressure area will become more of an influence across the Space Coast, further diminishing the strength of the frontal boundary and pushing much of the cloud cover off to the east. The primary weather concern Monday morning is the Cumulus Cloud Rule.

		Probability of Violating Weather Constraints				
Launch Day	30%	Primary Concerns: Cumulus Cloud Rule, Thick Cloud Layer Rule				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility: Isold Showers / 7 mi.	Clouds			Upper-Level Wind Shear: Low	
	Temp/Humidity: 68°F / 75%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low
Liftoff Winds (200'): 100° 12-17 mph	Cumulus	Scattered	3,500	7,000	Solar Activity: Low	
	Altocumulus	Scattered	10,000	12,000		
		Probability of Violating Weather Constraints				
24-Hour Delay	20%	Primary Concerns: Cumulus Cloud Rule				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility: None / 7 mi.	Clouds			Upper-Level Wind Shear: Low	
	Temp/Humidity: 72°F / 70%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low
Liftoff Winds (200'): 180° 15-20 mph	Cumulus	Scattered	3,500	7,000	Solar Activity: Low	
<p>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.</p>						
Next Forecast Will Be Issued		As Required				