



Launch Mission Execution Forecast



Mission: Terran 1 TM-1

Issued: 10 Mar 2023 / 0830L (1330Z)

Valid: 11 Mar 2023/ 1300 – 1600L (1800-2100Z)

Forecast Discussion: A strong cold front is forecast to move through central Florida later today and tonight. Southwesterly winds will gust to around 20 mph ahead of the front. There is a chance for showers and isolated thunderstorms with the front this afternoon. The potential for showers will continue into the night but the threat for thunder should end during the early evening hours. The front will clear the area early Saturday and cloud cover will begin to move out of the region. Some low clouds are likely to be around at the beginning of the count but should move out of the area rather quickly. At this point, it looks as if the clouds should be out of the area during the launch window. The primary concern looks to be from the Cumulus Cloud Rule in the event a few clouds stray across the area.

In the evening of a 24-hour delay, we will be in between systems as the Friday front is well off the coast. We should see mostly clear skies as slightly drier air moves across the area. The primary concern for launch will be from the Cumulus Cloud Rule in the event a stray cloud moves into the area.

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			NONE	
		Type	Coverage	Base (ft)		
Temp/Humidity: 75°F / 48%	Cumulus	Scattered	3,500	7,500		
Surface Winds: 010° 12-17 G 20 mph						
24-Hour Delay		Probability of Violating Weather Constraints				
24-Hour Delay	5%	Primary Concerns: Cumulus Cloud Rule				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility: None / 7 mi.	Clouds			NONE	
		Type	Coverage	Base (ft)		
Temp/Humidity: 80°F / 52%	Cumulus	Scattered	3,000	6,000		
Surface Winds: 150° 13-18 mph						
Notes	1. The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring any random time 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.					
Next Forecast Will Be Issued		As requested				

See <https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf> for more information