



Launch Mission Execution Forecast

Mission: Terran 1 TM-1

Issued: 9 Mar 2023 / 0930L (1430Z)

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



Forecast Discussion: Quiet weather across the Spaceport today before a storm system moving into the southeastern US slides out into the Atlantic late on Friday. This will bring a stronger cold front into the region late in the day on Friday, bringing scattered showers and thunderstorms. The front is expected to clear the Spaceport late Saturday morning, bringing an end to any notable precipitation chances by the start of the primary launch window. Brisk north winds will filter in behind the front for the launch opportunity, bringing in Atlantic cumulus that is expected to become more scattered through the window. The primary weather concern will be the Cumulus Cloud Rule associated with these clouds.

The Spaceport will be in-between systems on Sunday, bringing quiet and dry weather. Winds will remain breezy as they veer out of the southeast for the window. Passing cumulus clouds may present a small risk from the Cumulus Cloud Rule.

Launch Day	Probability of Violating Weather Constraints¹					
	10%	Primary Concerns: Cumulus Cloud Rule				
	Weather Conditions				Additional Risk Criteria²	
	Weather/Visibility: None / 7 mi.	Clouds			NONE	
	Type	Coverage	Base (ft)	Tops (ft)		
Temp/Humidity: 72°F / 53%	Cumulus	Scattered	3,500	7,500		
Surface Winds: 010° 13-18 G 21 mph						
24-Hour Delay	Probability of Violating Weather Constraints					
	5%	Primary Concerns: Cumulus Cloud Rule				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility: None / 7 mi.	Clouds			NONE	
	Type	Coverage	Base (ft)	Tops (ft)		
Temp/Humidity: 77°F / 60%	Cumulus	Scattered	3,000	6,000		
Surface Winds: 140° 13-18 G 22 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.					
See https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf for more information						
Next Forecast Will Be Issued		10 Mar 2023				