



Launch Mission Execution Forecast

Mission: Terran 1 TM-1

Issued: 6 Mar 2023 / 0900L (1400Z)

Valid: 8 Mar 2023/ 1300 – 1600L (1800-2100Z)



Forecast Discussion: Weak high pressure will dominate the weather across the Space Port today into Tuesday, bringing with it light and, at times, variable winds. Expect a weak backdoor cold front to move across the area late Tuesday night into Wednesday morning, bringing a few weak showers to the area, but this feature should be out of the area prior to the opening of the launch window. Winds are expected to be a little on the breezy side as the pressure gradient tightens between high pressure to the north and the weak cold front. The sea-breeze should develop and force clouds that develop inland and away from the launch pad area. As a result, expect only a minimal concern from the Cumulus Cloud Rule in the event some clouds remain in the area.

In the event of a 24-hour delay, high pressure will dominate the weather on Thursday. Expect winds to lessen late Wednesday night into Thursday. We will likely have another sea-breeze develop late Thursday morning into the early afternoon. Cloud cover associated with this feature should be inland before the window opens but have retained a slight probability due to cumulus clouds. The primary concern would be from the Cumulus Cloud Rule.

		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
	Temp/Humidity:	77°F / 60%	Type	Coverage	Base (ft)	Tops (ft)	
Surface Winds:	030° 12-17 G 22 mph	Cumulus	Scattered	3,500	7,500		
		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
	Temp/Humidity:	74°F / 51%	Type	Coverage	Base (ft)	Tops (ft)	
Surface Winds:	070° 10 - 15 mph	Cirrus	Scattered	27,000	31,000		
Notes	<ol style="list-style-type: none"> The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring any random time 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		7 Mar 2023					