



Launch Mission Execution Forecast



Mission: Terran 1 TM-1

Issued: 14 Mar 2023 / 0930L (1900Z)

Valid: 17 Mar 2023/ 0100 – 0315L (0500-0715Z)

Forecast Discussion: Cooler and drier air has overspread the Space Coast in the wake of yesterday's front. Brisk north winds will persist through much of today and Wednesday. Winds will begin to weaken tomorrow night as they begin to switch back to a southerly direction ahead of the next system developing over the central US. Winds on Thursday night/Friday morning should become southeasterly and will be in the 10 to 15 mph range with possible gusts to 20 mph by the time we reach the launch window. Expect only scattered low clouds in the area, but precipitation is not expected. Therefore, the primary concern for launch day is the Cumulus Cloud Rule

Probability of Violating Weather Constraints ¹																					
Launch Day	5% Primary Concerns: Cumulus Cloud Rule																				
	<table border="1"> <thead> <tr> <th colspan="4">Weather Conditions</th> <th colspan="2">Additional Risk Criteria²</th> </tr> </thead> <tbody> <tr> <td rowspan="3"> Weather/Visibility: None / 7 mi. Temp/Humidity: 63°F / 72% Winds (162 ft.): 170° 12-17 G 21 mph </td> <td colspan="3" style="text-align: center;">Clouds</td> <td rowspan="3">Upper-Level Winds</td> <td rowspan="3">Low to Mod</td> </tr> <tr> <td>Type</td> <td>Coverage</td> <td>Base (ft)</td> <td>Tops (ft)</td> </tr> <tr> <td>Cumulus</td> <td>Scattered</td> <td>3,500</td> <td>7,500</td> </tr> </tbody> </table>	Weather Conditions				Additional Risk Criteria ²		Weather/Visibility: None / 7 mi. Temp/Humidity: 63°F / 72% Winds (162 ft.): 170° 12-17 G 21 mph	Clouds			Upper-Level Winds	Low to Mod	Type	Coverage	Base (ft)	Tops (ft)	Cumulus	Scattered	3,500	7,500
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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																				