



Launch Mission Execution Forecast

Mission: Atlas V USSF-51

Issued: 29 Jul 2024 / 0800L (1200Z)

Valid: 30 Jul 2024 / 0645-0945 (1045-1345Z)



Forecast Discussion: A surface front stalled north of the Spaceport will increase easterly flow today, helping the sea-breeze to develop and move more inland this afternoon. Heavy rainfall is possible in storms through today, then drier air will move across the region mid-week. The front to the north may begin to dissipate Tuesday into Wednesday, however there is the possibility of showers and an isolated thunderstorm near or just off the Spaceport coast in the mornings Tuesday and Wednesday. The Cumulus Cloud Rule and Anvil Cloud Rules are the concerns for the primary launch window and Cumulus Cloud Rule is the concern for the backup launch window.

		Probability of Violating Weather Constraints ¹					
Launch Day	20%	Primary Concerns: Cumulus Cloud Rule, Anvil Cloud Rules					
	Weather Conditions				Additional Risk Criteria ²		
	Weather/Visibility:	Scat Showers / 7 mi.	Clouds				Solar Activity: Low-Mod
			Type	Coverage	Base (ft)	Tops (ft)	
Temp/Humidity:	78°F / 93%	Cumulus	Scattered	2,500	12,000		
Ground Winds (230'):	330° 7 - 10 knots	Altostratus	Scattered	18,000	21,000		
		Probability of Violating Weather Constraints					
24-Hour Delay	15%	Primary Concerns: Cumulus Cloud Rule					
	Weather Conditions				Additional Risk Criteria		
	Weather/Visibility:	Isolated Showers / 7 mi.	Clouds				Solar Activity: Low-Mod
			Type	Coverage	Base (ft)	Tops (ft)	
Temp/Humidity:	79°F / 93%	Cumulus	Scattered	2,500	12,000		
Ground Winds (230'):	180° 8 - 11 knots	Cirrostratus	Few	24,000	27,000		
Notes	<ol style="list-style-type: none"> The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring anytime 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. <p>See https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf for more information.</p>						
Next Forecast Will Be Issued	As needed.						