



Launch Mission Execution Forecast



Mission: Atlas V CFT

Issued: 4 Jun 24 /0930L (1330Z)

Valid: 5 Jun 24 /1042-1102L (1442-1502Z)

Forecast Discussion: A large area of high pressure off the Carolina coast will continue to bring mostly dry, easterly winds today. Coastal showers may linger nearshore overnight tonight and into the early morning hours, with a few occasionally clipping the Spaceport. A mid-level trough will begin to approach the Deep South tomorrow, causing weak steering winds to begin shifting westerly. Atmospheric moisture will also begin to increase. The sea breeze boundary should develop near the time of the launch window, possibly triggering cumulus clouds that pose a risk, but the threat appears low as most convective development should occur after the launch window.

By the backup day, the ridge is expected to be positioned over the spaceport with westerly flow prevailing. Although this will increase the threat of afternoon thunderstorms, the early launch window should mean the threat of a weather violation low. The Cumulus Cloud Rule remains the primary concern.

Launch Day		Probability of Violating Weather Constraints ¹					
Launch Day	10%	Primary Concerns: Cumulus Cloud Rule					
	Weather Conditions				Additional Risk Criteria ²		
	Weather/Visibility: Isold Showers / 7 mi	Clouds				Solar Activity: Low-Mod	
	Temp/Humidity: 82°F / 70%	Type	Coverage	Base (ft)	Tops (ft)		
Liftoff Winds (200'): 110° 10 - 15 kts	Cumulus	Scattered	3,000	6,000			
24-Hour Delay		Probability of Violating Weather Constraints ¹					
24-Hour Delay	10%	Primary Concerns: Cumulus Cloud Rule					
	Weather Conditions				Additional Risk Criteria		
	Weather/Visibility: Isold / 7 mi.	Clouds				Solar Activity: Low-Mod	
	Temp/Humidity: 83°F / 70%	Type	Coverage	Base (ft)	Tops (ft)		
Liftoff Winds (200'): 200° 10 - 15 kts	Cumulus	Scattered	3,000	12,000			
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	As Required					