



Launch Mission Execution Forecast

Mission: Delta IV Heavy L-70

Issued: 27 Mar 2024 / 0700L (1100Z)

Valid: 28 Mar 2024 / DURING WINDOW



Forecast Discussion: A surface ridge of high pressure extending across the western Atlantic will continue moving away from the region, supporting another mainly dry but breezy day along the coast for this Wednesday. A cold front approaching from the northwest will bring more clouds, scattered showers and possibly a few thunderstorms to the area late tonight into Thursday morning. This front is expected to shift offshore by the opening of the launch window, taking most of the showers and clouds with it. However, winds will increase just ahead of and especially behind this frontal boundary, becoming quite gusty during the afternoon and evening tomorrow. Due to these strong ground winds, the probability of weather violation for the primary launch attempt tomorrow is set well above climatology. Improving weather conditions are expected Friday into the weekend as the parent low pressure system pushes northeast of the area and high pressure settles across the Southeast US; however breezy conditions will still persist into Friday. By next Monday, that high pressure system retreats out into the Atlantic, bringing return southerly flow and another, weaker front into the Southeastern states.

Launch Day	Probability of Violating Weather Constraints					
	70%	Primary Concerns: Ground Winds, Cumulus Cloud Rule				
	Weather Conditions					Additional Risk Criteria
	Weather/Visibility:	Isol Showers / 7 mi.	Clouds			Solar Activity: Low-Mod
	Temp/Humidity:	76°F / 60%	Type	Coverage	Base (ft)	
	Ground Winds (306'):	320° @ 25 - 30 knots	Cumulus	Scattered	2,500	
			Altostratus	Scattered	8,000	12,000
24-Hour Delay	Probability of Violating Weather Constraints					
	40%	Primary Concerns: Ground Winds				
	Weather Conditions					Additional Risk Criteria
	Weather/Visibility:	None / 7 mi.	Clouds			Solar Activity: Low-Mod
	Temp/Humidity:	72°F / 50%	Type	Coverage	Base (ft)	
	Ground Winds (306'):	020° @ 20 - 25 knots	Cumulus	Few	2,500	5,000
96-Hour Delay	Probability of Violating Weather Constraints					
	10%	Primary Concerns: Cumulus Cloud Rule				
	Weather Conditions					Additional Risk Criteria
	Weather/Visibility:	None / 7 mi.	Clouds			Solar Activity: Low
	Temp/Humidity:	80°F / 65%	Type	Coverage	Base (ft)	
	Ground Winds (306'):	160° @ 12 - 17 knots	Cumulus	Scattered	2,500	9,000
			Cirrus	Scattered	25,000	29,000

Note: The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear and solar activity.

Next Forecast Will Be Issued	As Required
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