Launch Mission Execution Forecast

Mission: New Glenn Blue Ring Pathfinder
Issued: 12 January 2025 / 0700L (1200Z)
Valid: 13 January 2025 / 0100-0400L (0600-0900Z)

Forecast Discussion: High pressure will build across the area today, then a disturbance approaching the region Monday may increase mid-level clouds across the Spaceport as early as Monday morning. This disturbance will generate showers, breezy winds and widespread clouds across the Spaceport late Monday into early Tuesday. The POV is low for the primary launch window, then increases for the backup window with the concerns being the Cumulus Cloud Rule, Thick Cloud Layers Rule and Liftoff Winds.

For recovery, significant sea heights will lower to around 5-6 feet for the primary window, and lower even more to around 4-5 ft for the backup window. Winds should remain light, making a low risk for offshore landing weather on both primary and backup periods.

Launch Day

Probability of Violating Weather Constraints[1]

10%

Primary Concerns: Thick Cloud Layers Rule

Weather Conditions		Additional Risk Criteria[2]	
Weather/Visibility:	None / 7 mi	**Solar Activity**:	Low
Temp/Humidity:	54°F / 75%		
Liftoff Winds (60'):	360° 9 - 15 fps	**Offshore Landing Weather:**	Low

Clouds

Type	Coverage	Base (ft)	Tops (ft)
Cumulus	Few	3,000	6,000
Altostratus	Scattered	15,000	20,000

24-Hour Delay

Probability of Violating Weather Constraints[1]

60%

Primary Concerns: Cumulus Cloud Rule, Thick Cloud Layers Rule, Liftoff Winds

Weather Conditions		Additional Risk Criteria	
Weather/Visibility:	Sct Showers / 7 mi.	**Solar Activity**:	Low
Temp/Humidity:	59°F / 90%		
Liftoff Winds (60'):	350° 25 - 35 fps	**Offshore Landing Weather:**	Low

Clouds

Type	Coverage	Base (ft)	Tops (ft)
Cumulus	Scattered	3,000	12,000
Altostratus	Broken	15,000	22,000

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 Needed