Launch Mission Execution Forecast

Mission: Falcon 9 Starlink 4-8
Issued: 20 Feb 22 / 0900L (1400Z)
Valid: 21 Feb 22 / 0934 - 1122L (1434 – 1622Z)

Forecast Discussion: High pressure positioned over Virginia will bring easterly winds across the Space Coast today, moderating temperatures. On Monday, a low pressure system will develop in the Great Plains region, but high pressure will remain in control over Central Florida, keeping favorable launch conditions at the Spaceport. The primary weather concern Monday is the Cumulus Cloud Rule, associated with the flow around the periphery of the high pressure area.

On Tuesday, expect much the same conditions as high pressure continues to dominate the Southeast U.S., pushing the low pressure area into the Mid-West. The primary weather concern remains the Cumulus Cloud Rule.

Launch Day

Probability of Violating Weather Constraints[1]

10% — **Primary Concerns**: Cumulus Cloud Rule

Weather Conditions		Clouds				Additional Risk Criteria[2]	
		Type	Coverage	Base (ft)	Tops (ft)		
Weather/Visibility:	None / 7 mi.					**Upper-Level Wind Shear**:	Low
Temp/Humidity:	72°F / 82%	Cumulus	Few	3,000	8,000	**Booster Recovery Weather**:	Low-Mod
Liftoff Winds (200'):	110° 10 - 15 mph					**Solar Activity**:	Low

24-Hour Delay

Probability of Violating Weather Constraints

10% — **Primary Concerns**: Cumulus Cloud Rule

Weather Conditions		Clouds				Additional Risk Criteria	
		Type	Coverage	Base (ft)	Tops (ft)		
Weather/Visibility:	None / 7 mi.					**Upper-Level Wind Shear**:	Moderate
Temp/Humidity:	74°F / 82%	Cumulus	Few	3,000	10,000	**Booster Recovery Weather**:	Low
Liftoff Winds (200'):	140° 10 - 15 mph					**Solar Activity**:	Low

Notes

1. *The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring anytime 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