Launch Mission Execution Forecast

Mission: Falcon 9 Starlink 4-20
Issued: 3 Sep 2022 / 0830L (1230Z)
Valid: 4 Sep 2022 / 2032 – 2210L (5/0032 – 0210Z)

Forecast Discussion: The Space Coast is in a pattern of onshore flow, which makes morning showers possible, but limits thunderstorm development along the coast This onshore flow will deepen through the weekend over the Spaceport, which will decrease the threat of thunderstorms as the sea breeze is encouraged to move inland by early afternoon each day. The primary launch weather concern for a late Sunday or Monday evening attempt will be the Cumulus Cloud Rule associated with onshore moving showers.

Launch Day

Probability of Violating Weather Constraints[1]

20% — **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:	81°F / 80%	Cumulus	Few	2,500	8,000	**Booster Recovery Weather**:	Low
Liftoff Winds (200'):	070° 8 - 13 mph	Altocumulus	Few	12,000	14,000	**Solar Activity**:	Low

24-Hour Delay

Probability of Violating Weather Constraints

20% — **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**:	Low
Temp/Humidity:	82°F / 80%	Cumulus	Few	2,500	8,000	**Booster Recovery Weather**:	Low
Liftoff Winds (200'):	070° 7 - 12 mph	Altocumulus	Scattered	12,000	14,000	**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