



Launch Mission Execution Forecast

Mission: Falcon 9 NASA Crew-11

Issued: 30 Jul 2025 / 0900L (1300Z)

Valid: 31 Jul 2025 / 1200 - 1220L (1600 - 1620Z)



Forecast Discussion: Surface high pressure to the southeast of the Spaceport will maintain southwesterly surface flow in the mornings, with the sea breeze likely developing just after the launch window for all three opportunities. There is a small chance of the sea breeze developing earlier, making for a low Probability of Violation for the Cumulus Cloud Rule. A front pushing into the Southeast U.S. by the weekend is likely to bring increased moisture to the local area, with a slightly higher threat for a Cumulus Cloud Rule violation on Saturday. More notably, this same front will bring a significantly higher threat for showers and storms, as well as higher winds, along the ascent corridor Friday and especially Saturday.

Launch Day	Probability of Violating Weather Constraints ¹						
	10%	Primary Concerns: Cumulus Cloud Rule					
	Weather Conditions				Additional Risk Criteria ²		
	Weather/Vis:	None / 7 miles	Clouds			Upper-Level Wind Shear:	Low
		Type	Coverage	Base (ft)	Tops (ft)		
Temp/Humidity:	88°F / 70%	Cumulus	Few	3,000	6,000	Ascent Corridor Recovery:	Low-Mod
Liftoff Winds (200'):	220° 6 - 11 mph					Solar Activity:	Low

24-Hour	Probability of Violating Weather Constraints						
	15%	Primary Concerns: Cumulus Cloud Rule					
	Weather Conditions				Additional Risk Criteria		
	Weather/Vis:	None / 7 miles	Clouds			Upper-Level Wind Shear:	Low
		Type	Coverage	Base (ft)	Tops (ft)		
Temp/Humidity:	87°F / 70%	Cumulus	Scattered	3,000	8,000	Ascent Corridor Recovery:	High
Liftoff Winds (200'):	230° 7 - 12 mph					Solar Activity:	Low

48-Hour	Probability of Violating Weather Constraints							
	15%	Primary Concerns: Cumulus Cloud Rule						
	Weather Conditions				Additional Risk Criteria			
	Weather/Vis:	None / 7 miles	Clouds			Upper-Level Wind Shear:	Low	
		Type	Coverage	Base (ft)	Tops (ft)			
Temp/Humidity:	87°F / 70%	Cumulus	Scattered	3,000	10,000	Ascent Corridor Recovery:	High	
Liftoff Winds (200'):	220° 8 - 13 mph		Cirrostratus	Few	28,000	30,000	Solar Activity:	Low

Note

- The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring any random time during the launch window.
- 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 **Launch FAQ** <https://45thweathersquadron.nebula.spaceforce.mil/pages/launchForecastSupport.html> for more information

Next Forecast Will Be Issued | As Required