

Launch Mission Execution Forecast

 Mission:
 Falcon 9 NASA Crew-11

 Issued:
 29 Jul 2025 / 1200L (1600Z)

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

 1 Aug 2025 / 1135 - 1155L (1535 - 1555Z)
 2 Aug 2025 / 1110 - 1130L (1510 - 1530Z)



Forecast Discussion: The sea breeze will help develop a possible isolated shower or thunderstorm near, or slightly after, the launch window for all three opportunities. High pressure aloft will also continue above normal temperatures and hot/humid weather through Friday. A front pushing into the Southeast by the weekend is likely to bring increased moisture to the local area, with a slightly higher threat for launch violations. More notably, this same front will bring a significantly higher threat for showers and storms, as well as higher winds, to the staging areas northeastward up the ascent corridor by Saturday.

	Probability of Violating Weather Constraints ¹								
Day	15%	Primary Concerns: Cumulus Cloud Rule							
сh Сh	Weather Conditions							Additional Risk Criteria ²	
Launch	Weather/Vis:		None/7 miles	Туре	Clouds Coverage	S Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low
	Temp/Humidi	ity:	88°F / 69%	Cumulus	Few	3,000	6,000	Ascent Corridor Recovery:	Low-Mod
	Liftoff Winds	(200') :	210° 5 - 10 mph					Solar Activity:	Low
	Probability of Violating Weather Constraints								
ur	20% Primary Concerns: Cumulus Cloud Rule								
24-Hour	Weather Conditions						Additional Risk Criteria		
	Weather/Vis:		None/7 miles	Туре	Clouds Coverage	S Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low
	Temp/Humidi	ity:	87°F / 70%	Cumulus	Scattered	3,000	8,000	Ascent Corridor Recovery:	High
	Liftoff Winds	(200') :	220° 5 - 10 mph					Solar Activity:	Low
	Probability of Violating Weather Constraints								
ur	25% Primary Concerns: Cumulus Cloud Rule, Surface Electric Fields Rule, Anvil Cloud Rules								
P H	Weather Conditions							Additional Risk Criteria	
48-Hour	Weather/Vis:		Iso Showers/7 miles	Туре	Clouds Coverage	S Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low
	Temp/Humidi	ity:	87°F / 70%	Cumulus	Scattered	3,000	10,000	Ascent Corridor Recovery:	High
	Liftoff Winds	(200') :	230° 5 - 10 mph	Altostratus	Few	16,000	19,000	Solar Activity:	N/A
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 <u>https://45thweathersquadron.nebula.spaceforce.mil/pages/launchForecastSupport.html</u> for more information 								
Next Forecast Will Be Issued 30 Jul 2025									